



American Society of Biomechanics Newsletter

Vol. 17 December 2004 No. 2

www.asb-biomech.org

From the President

J. J. Trey Crisco

Greetings to all ASB members. You should be very proud of yourselves and your society! Members ventured to Portland, Oregon for our 28th annual meeting in record numbers and we had a lot of fun while we were there! Thanks to Meeting Chair Michael Bottlang and Program Chair Steve Robinovitch for finding a special venue and creating a scientific program containing the best content to date. The atmosphere proved ideal for the exchange of scientific ideas, the establishment of new collaborations, meetings of old and new friends, and having a very enjoyable time. The food and beverages really set the bar high for upcoming meeting: will the chocolate fountain become an ASB icon?

I am already looking forward to next year's meeting, which will be quite different than this years. The 2005 meeting will be held in conjunction with the International Society of Biomechanics (ISB) meeting in Cleveland, Ohio, August 1-5. Working with the ISB, the ASB has arranged Thursday to be slotted as "ASB day" and Art Kuo is hard at work on the program. See the ISB meeting web site www.isb20005.org for all the details. For the 30th annual ASB meeting in 2006, we are happy to announce that the campus of Virginia Tech in beautiful Blacksburg, Virginia has been selected as the venue.

Annual meetings are our primary vehicle for accomplishing our mission to encourage and foster the exchange of information and ideas among biomechanists working in different disciplines and fields and to facilitate the development of Biomechanics as a basic and applied science. Bringing together biomechanists from different disciplines and fields has always been a challenge and is especially challenging in these days of shrinking travel budgets. If you are working with colleagues in under represented disciplines such as cell Biomechanics, animal Biomechanics and ergonomics - I hope you will encourage them to attend and participate in an ASB meeting.

Another primary goal of our meetings is to support student education and development. Thanks to some creative financing by our Meeting Chair, student registrations were subsidized at this year's meeting. Another exciting opportunity for students at this year's annual meeting was the Mentoring Program, developed by our past Student Representative Max Kurz. At last count over 35 students were paired with more senior biomechanists to discuss science and careers. Another first at this year's annual meeting was the Women in Science Breakfast where female students gathered with more senior biomechanists in an informal session to share their perspectives on the unique challenges and rewards for women in science. I would like to extend a special thanks to those senior biomechanists who offered their services.

Permit me to reminisce... I was a graduate student heading to my first scientific meeting and podium presentation. It was 1987 and the 11th Annual ASB meeting. I flew into San Francisco to see some friends and relax before the big meeting and first public talk – ever. At my friend's suggestion, I stopped by Napa valley on my way out. After a few wineries and a mud bath I was ready for all the grueling questions I was anticipating – but it turned far worse than I had ever imagined. I learned the hard way that the speaker's ready rooms are a good idea. These days its tough to have your PowerPoint slides upside down, but with 35 mm slides, made from film, it was not uncommon to have a few in the wrong orientation since you manually loaded them into a carousel – those antique circular devices that held the slides. With all the confidence of a young graduate student who worked daily digitizing data on a backlit tablet, I loaded my slides just before my talk, and then proceeded to the podium. To my horror every one was upside down! I'll never forget the moderator who graciously asked the projectionist to place the next talk on the projector and allowed me to fix my slides and present my talk a few speakers later. At any other meeting I probably (rightfully) would have been tarred and feathered, but people were incredibly supportive, as anyone who has attended our meeting knows. I had come from a small lab and I had never seen such great and diverse science in Biomechanics presented in one place. It is this support and nature of the ASB members that has always been one of the attractions of the society and is the reason why I am so excited to have my own students attend the meetings.

The society also strives to support and recognize the scientific accomplishments of its members. As a member you automatically get reduced subscription rates to several great journals, but you should also take advantage of some the granting programs listed in the Newsletter. Don't be shy about applying for one of the numerous awards that ASB has established.

One of the biggest challenges for ASB is managing it affairs, since there is no support staff and all Executive Board Members volunteer their time. Most larger societies have moved to professional organizations to help with abstract submission and publication, meeting preparations, administrative affairs, and other duties such as managing web sites. Enlisting a professional organization to handle tedious and administrative tasks leaves more time for the Executive Board to focus on important issues for the society and the society's future. Of course, if we were to do this, we would give up some of that close-knit networking that is so attractive to the ASB members, and these professional organizations do charge fees. This challenge will be one of my primary tasks in the upcoming year and the Executive Board and I hope to have a plan to present to the members by the next annual meeting. Of course any and all input is welcome. Please feel free to contact me on this issue or any others of importance to you.

See you in Cleveland!



ASB NEWSLETTER volume 17, number 2

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Editors Note:

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

www.asb-biomech.org/newsletter

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 Michelle Sabick at MSabick@boisestate.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 Steve McCaw (smccaw@ilstu.edu), Education Committee Chair with your name, address, phone/fax number, email address, and your desired involvement. This information will be included in a data base which is periodically updated and distributed to the Executive Board.

Graduate Programs

The ASB maintains an on-line database of universities and colleges with graduate programs in biomechanics. The database is organized alphabetically by country and state and currently includes more than 70 institutions from Canada, the United Kingdom, and 32 different states within the US. This is a great resource for undergraduate students who may be considering graduate school as well as for anyone who just wants to find out what's going on at other institutions.

Is your institution included in the database? If not, new information can be sent to Kathy Simpson at the University of Georgia via email: ksimpson@uga.edu. Because the information contained in these listings may gradually become outdated as equipment and personnel at laboratories change over time, all institutions are encouraged to review and update their information periodically.

New and updated program information can be transmitted directly via e-mail. Alternatively, an online form can be used to submit updated graduate program details.

The graduate program database can be accessed through the Society's homepage at: **www.asb-biomech.org**

Secretary/Treasurer

Don Anderson

Hello everyone. I am back after a one year hiatus from the newsletter, now with my own column to write as your Secretary/Treasurer. First, let me thank Ted Gross for the fine job he did during his three year stint in this job. We have nearly completed transitioning the S/T office from Seattle to Iowa City, and I am getting the feel of the job now.

I would like to take this opportunity to let you know that I have inherited a very stable financial picture, and the Society is comfortably solvent. The directive we follow within the Executive Board is to try to maintain adequate financial reserves to cover the full cost of an Annual Meeting, just in case we were ever to have a huge loss on that front. The success of our meeting in Portland has actually added to our reserves, and this is allowing the Executive Board to make additional expenditures on behalf of the membership. Sponsoring a healthy series of Regional Meetings, aimed at developing stronger regional biomechanics networks, especially among students, is one way in which we spend these reserves. Stay tuned for announcement of new initiatives in the near future.

One of the first issues that I will be dealing with is membership renewal. Knowing how publication of this newsletter goes, you have likely already received an e-mail from me reminding you to renew your membership. At \$40 for regular members, and \$15 for student members, I would argue that ASB membership is about as good a bargain as you'll find among professional societies. You are able to pay your dues either by check or credit card. There has been a slight change in how we process credit cards, as we have chosen to shift to PayPal as our means of processing. This is to alert you that this means you are likely to see PayPal's name show up on your credit card bill, with some version of an ASB label after it once your dues are processed. This year, we will be handling the actual PayPal transaction ourselves within the S/T office in Iowa City. So for now you will still be asked to provide hardcopy of credit card information. In the future, we hope to transition to allowing you to transact directly through PayPal online, should you feel comfortable doing so. We will continue to charge a service fee for using a credit card, but since PayPal fees are lower, you're likely to see that service fee decrease by next year.

Finally, please make sure that we have your most current e-mail address as this greatly simplifies society correspondence. The 2005 dues and subscription invoices should be e-mailed in early December. If you have not received one, please contact me (don-anderson@uiowa.edu or 319/335-8135).

That's all for now from Iowa City. I hope you all have a wonderful holiday season!

Student's Corner

Melissa Scott-Pandorf

This year marked a new era for ASB student members. The Portland meeting was deemed a great success and the student members have never been more active. The launching of two new programs at the Portland meeting has increased student and senior scientist interaction significantly. The Mentor Program had profound success with 70 participants. The Women in Science Breakfast was also met with enthusiasm with approximately 65 students and senior scientists in attendance. Furthermore, the ASB student meeting had its second straight year of filling our reserved room to maximum capacity. These increased interactions and the dedication of the students to be an active part of the society is what ASB has been striving for to nurture students into successful scientists.

Students attending this year's student meeting also had the opportunity to participate in an open forum with scientists in industry. This offered a different perspective for those interested in expanding outside the academic setting.

Students getting ready for their dissertation or thesis work should be aware of ASB's Graduate Student Grant-In-Aid Program. This program is designed to offer a source of research funding for ASB students. Funds from this program 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. The ASB Executive Board anticipates making 3-5 awards that range from \$500 to \$2500 for a one-year period. Students must be members of ASB or have a pending membership application by January 1st, 2005 to be eligible for an award and application must be submitted by midnight January 15th. In addition, students planning to present research at the combined ISB/ASB meeting in August 2005 should note the January 31st abstract due date. For more information on the Grant-In-Aid Program or the annual meeting please check the ASB website.

I was fortunate enough to be elected as the 2004-2005 student representative at this year's meeting in Portland. I start my position with aspirations of continuing the vital new programs into the ISB/ASB meeting in Cleveland, Ohio. I hope to increase the number of participants in the Mentor Program along with preparing some structured ideas for mentors and students to do while at the meeting. Also, although the Women in Science Breakfast was a success, it could be further served by moving it to an evening social event. The time constraints of a breakfast social event cut interaction time between the female senior scientists and students considerably. Furthermore, I would like to increase student to student interaction with a Student Mixer to be planned in collaboration with the ISB and CSB student representatives. As I strive to compile new educational opportunities, I would like to hear any ideas you would like to put forward. Please feel free to contact me via e-mail at mmscott@mail.unomaha.edu.

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Past Meeting Chair

Michael Bottlang

Were you at the 2004 ASB conference in Portland? If so, your attendance, along with 486 other attendees made this meeting a great success. Over 10% of the attendees came from abroad, including Australia, Austria, Canada, China, Italy, Ireland, Japan, Korea, New Zealand, Taiwan, and the UK.

If you were there, you could have enjoyed the many lab tours offered, the seamless AV presentations supported by professional staff, the delicious food, open bars, and a banquet at the Chinese Garden that is for sure to be remembered. Remembered not just for the lion dance, Pan-Asian food and salsa band, but also for the many conversations, networking, and exchange that continued throughout the evening. It is this interaction among peers that makes the ASB a most valuable and unique society to me.

All of this, plus coverage for free student registration came at a price of \$107,760. We raised a record \$119,140 for the meeting. Thanks to the generous support of our many sponsors, we could cover all meeting expenses, and will gladly forward all meeting proceedings totaling \$11,380 to the ASB in support of future meetings.

If you were satisfied with the meeting organization, this was because of the meticulous preparation and execution by 22 volunteers, including staff of the Legacy Biomechanics Laboratory. Mark Sommers professionally managed conference registration and billing. Marcus Mohr coordinated all podium presentations, poster exhibits, and industry exhibits during the ASB meeting – and made this complex challenge seem easy. He arranged that all 241 posters could remain on display throughout the conference. In addition, he maintained the conference webpage. Larry Ehmke meticulously planned all catering for the conference. Tanja Augustin reliably arranged transportation for all lab tours. I felt truly honored to work with such a professional and motivated organizing team. I also would like to thank the ASB executive board for given us the opportunity to host the conference despite our relatively short research history. This opportunity has made an impact for students and researchers across Oregon, laying the groundwork for future collaborations.

Last, but most importantly, special thanks to my wonderful fiancé who planned every detail of our November wedding so that I could focus on ASB preparations. What some of you may not have known is that the chocolate fountain at the welcome reception was really just a ‘dry run’ for our wedding reception on November 6th.

Thank you for showing your support of the American Society of Biomechanics by attending the Portland Meeting. If you could not attend this year, make sure to join the next ASB meeting! Looking forward to see you on August 1-5 in Cleveland!



Local meeting organizers from the Legacy Biomechanics Laboratory. From left to right - Larry W. Ehmke, Mark Sommers, Marcus Mohr, Kati Weidner, Tanja Augustin, Michael Bottlang, and Michael J. Bruehl

Past Past President Joan Bechtold

My two remaining duties are to report on the nominating committee and the awards committee. Before that, though, I would like to again thank you all for the privilege of the years of association I have had with ASB. I have made so many wonderful friends, and learned so much; it has been a true pleasure. ASB is a vibrant society with strong leadership and committed members, and I look forward to what is in store in coming years.

Nominating Committee

I chaired the nominating committee for 2004, and the members consisted of Roger Enoka, Phil Martin, Walter Herzog, Trey Crisco. Roger and Phil were voted on by the membership at the 2003 business meeting, and Walter and Trey served as President and President-Elect. The nominees for Program Chair Elect were Joe Hamill and Irene Davis (voted in: Davis). The nominees for President Elect were Rodger Kram and Ted Gross (voted in: Gross)

Awards Committee

I also chaired the awards committee for 2004, and the other members consisted of Walter Herzog, Trey Crisco, Jesus Dapena, Michael Schwarz, Tom Roberts, Michael Feltner, and Don Chaffin. This group of people worked extremely hard and conscientiously, and I would like to thank them again for their very generous service.

To determine winners, scores from reviewers were ranked. All winners had consensus of the committee. We had a large number of applicants, and all were of very high quality, so the choices were difficult, and the winners were truly outstanding. Congratulations to these fine individuals.

Borelli Award

Thomas P. Andriacchi
Stanford University

Note that Tom Andriacchi donated his award money back to ASB for Pre-and Post- doctoral student awards.



Pre-Doctoral Young Scientist Award

Silvia Salinas Blemker
Stanford University

Rectus femoris fiber excursions predicted by a 3D model of muscle



Post-doctoral Young Scientist Award

Seth W. Donahue

Michigan Technological University

Bone strength is not compromised with aging in black bears (ursus americanus) despite annual periods of disuse (hibernation)



For the James Hay, Journal of Biomechanics and Clinical Biomechanics awards, finalists were chosen from the top 20% of abstracts submitted to the annual meeting. Steve Robinivitch provided our committee with these abstracts, based on the scores of his program committee. The Awards committee selected the award for which each abstract would be eligible and then ranked the blinded abstracts within each category. The James Hay award winner was chosen based on the abstract. Two finalists for the Journal of Biomechanics and Clinical Biomechanics award were selected as the top two abstracts in each category. They were then asked to present their work at the Awards session at the annual meeting in Portland. The final award was chosen on the basis of the presentation. The Awards committee for the scientific presentation consisted of myself, Walter Herzog, Trey Crisco, Ted Gross and Ron Zernicke. All work was outstanding, and it was a pleasure to have such excellent research from which to choose.

James Hay Award (Inaugural award, first winner)

Blake M. Ashby and Scott L. Delp

Stanford University

Optimal control simulations of standing long jumps with free and restricted arm movement



Journal of Biomechanics Award

Finalist

Carina J. Bender and David A. Hawkins

University of California, Davis

Quantitative characterization of lateral force transmission in passive skeletal muscle



Winner

Marie Shea, Brenden L. Hansen, Dawn A. Olson, Denise Dinulescu, Ben Orwoll, John K. Belknap, Eric S. Orwoll, and Robert F. Klein
Oregon Health & Science University

Influence of sex and genotype on skeletal fragility



Clinical Biomechanics Award

Finalist

Allison Arnold, May Liu, Michael Schwartz, Sylvia Öunpuu, Luciano Dias and Scott Delp

Stanford University, Gillette Children's Specialty Healthcare, Connecticut Children's Medical Center, and Children's Memorial Medical Center

Muscle-tendon lengths and velocities of the hamstrings after surgical lengthening to correct crouch gait



Winner:

Dawn C. Mackey and Stephen N. Robinovitch

Simon Fraser University

Postural steadiness during quiet stance does not associate with ability to recover balance in older women



President's Award

Warren Darling, James Herrick, David McNeal, Kimberly Stilwell-Morecraft, and Robert Morecraft

University of Iowa and University of South Dakota

Measurement forces during manipulation in non-human primates

ASB Travel Award

The ASB Travel award for 2004 was split between two applicants, each receiving \$700. Steve McCaw (Illinois State University) and Peter Zani (University of Colorado) will present a progress of their travel at the 2005 annual meeting (ISB in Cleveland).

Student Travel Awards

ASB offers travel awards to student attendees presenting their work at the annual meeting. This year's meeting drew a significant number of interested students. We were able to accommodate all applicants, by increasing the amount available for travel, and slightly reducing the amount available for each student.

We had a record number of applicants for many of these awards, and I would encourage anyone interested and eligible to apply in 2005 and future years. These awards help to develop careers, recognize outstanding work, and honor outstanding careers, and 2004 was exemplary in all aspects. Congratulations to all!



Step-by-step guide to online access to *Journal of Biomechanics* for members of the American Society of Biomechanics

Journal of Biomechanics is now available online to Society members who subscribe to the journal only via a new site. For your free access to the journal online please follow these instructions.

1 - Activating access to *Journal of Biomechanics*

To activate access and to create your personal account, you will need your Elsevier Customer Reference Number. Your Customer Reference Number can be found on the mailing label of the paper issue of *Journal of Biomechanics*.

2 - Type in the following URL:

<https://cs.sciencedirect.com/activate/jbio/asb>

Note that “<https://>” MUST be entered for this URL – “<http://>” will not work. This is to ensure that your registration details are secured when you enter them into the registration form.

3 - Enter your Customer Reference Number and click on “submit”.

The next step is completing a user profile. You will be asked to fill out a form and choose your own password. A username will be assigned to you. You will be notified of this. Both username and password will be case sensitive. After registration you can directly login with your new username and password.

Note – please do NOT use special characters, such as ö, ä, æ when entering your personal details into the profile form.

4 - Now you have registered you can go straight to:

<http://www.sciencedirect.com/jbio> and enter your personal username and password in the login bar on the top of the page

If you encounter any problems registering, please note that older browsers may not support SSL encryption, which is required for secure data transmission. Also, cookies must be enabled in your browser to support the registration process.

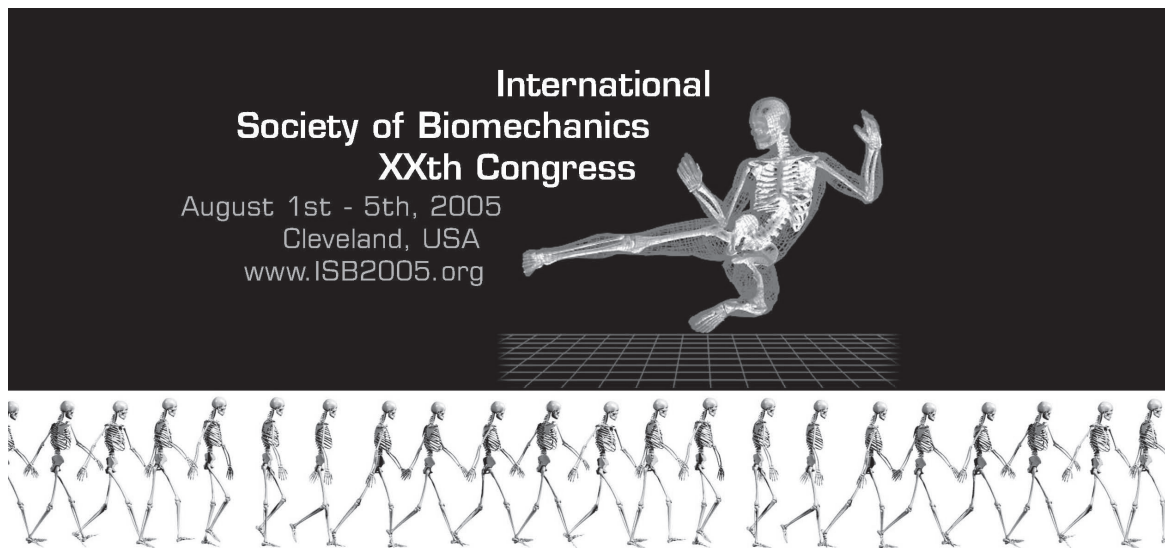
Should you require any assistance, including if you cannot find your Customer Reference Number, please do not hesitate to contact the Customer Support department as follows:

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Program Chair

Art Kou

Call for Papers: 29th Annual Meeting of the American Society of Biomechanics

Abstract deadline: 31 January 2005

This meeting will be held in conjunction with the 20th Congress of the International Society of Biomechanics (<http://www.isb2005.org>), in Cleveland, Ohio, 1-5 August 2005. All submitted presentations and posters will be combined with ISB and distributed throughout the week, but ASB award and special sessions activities will take place on Thursday 4 August. For this combined meeting, ASB will adopt the ISB abstract guidelines (single page abstracts). The call for papers is available at <http://www.isb2005.org/abstracts/>, and an on-line submission form will be available mid-November.

Meeting Chair-Elect

Stefan Duma

The 2006 Annual Meeting of the American Society of Biomechanics is to be held at Virginia Tech, in Blacksburg Virginia. The exact dates will be released later, but the target time frame is September/October.

The organizing committee consists of Dr. Stefan Duma (chair) and Dr. Kevin Granata (co-chair) and Dr. Mike Madigan (co-chair). The conference will be hosted by the many biomechanics faculty in the newly formed Virginia Tech - Wake Forest School for Biomedical Engineering and Sciences.

More information about Virginia Tech and the biomedical engineering program can be found at www.sbes.vt.edu.

Southern California Meeting

Guillermo Noffal

It is my pleasure to announce the fourth Southern California Conference on Biomechanics to be held April 22-23, 2005 at California State University Fullerton in California, USA. The Southern California Conference on Biomechanics seeks to foster the professional development of graduate and undergraduate students in biomechanics by providing students an opportunity to present their research to the biomechanics community. As such, only graduate and undergraduate students in biomechanics are eligible to present papers at the conference. Details regarding the abstract submission process and presentation format can be found at the conference web site:

<http://hdcs.fullerton.edu/knes/sccbio/>

The conference also seeks to promote biomechanics and to increase the exchange of ideas among biomechanics programs within the greater Southern California area.

Conference Organizers:

- Dr. Guillermo J. Noffal, California State University, Fullerton
- Dr. Karen Perell, California State University, Fullerton

Program Co-Chairpersons:

- Dr. William Whiting, California State University, Northridge
- Dr. Michael Feltner, Pepperdine University

Sponsor:

The conference is sponsored by the American Society of Biomechanics.

Important Dates:

Abstract Submission: March 15, 2005

Meeting Dates: April 22-23, 2005

Please direct email inquiries to gnoffal@fullerton.edu

Education Committee

Steve McCaw

Portland. For centuries, mention of the city has invoked images of phagocytes chasing bacteria, crowded and animated poster sessions, finite element models of innumerable anatomic structures, hibernating bears, Southwestern food served in Chinese gardens, and great venues for darts and beer. The recent ASB meeting provided all of these, and more. Attendance at the meeting exceeded expectations, the quality of presentations was outstanding, and social events were made even more memorable through the cooperation of the sometimes fickle Oregon weather. Congratulations are extended to the program chair Steve Robinovitch, the conference chair Michael Bottlang and his organizing committee, and a hearty thank you is extended to all of the student volunteers who helped the meeting run smoothly. Thanks also to those of you who completed the on-line conference survey; results are being compiled and results will be shared in detail with the Executive Board and future conference planners.

ASB Graduate Student Grant-in-Aid Program The Grant-in-Aid program makes available to graduate students money to support research endeavors conducted as part of a degree program. The deadline for the next submission is January 15, 2005. Details on the program are available elsewhere in the newsletter and also off the ASB website. I was approached at the annual meeting in Portland by several of the recipients, each of whom expressed tremendous gratitude to the ASB for the generous support of this program. We can look forward to seeing presentations from the 2004 award winners at next year's meeting.

Tutorials at the Annual Meeting The tutorials by Rick Lieber (The use of molecular biology in biomechanics research) and Walter Herzog (Muscle Mechanics: History and current applications) were well attended and deeply appreciated by the attendees. As the 2005 ASB meeting in Cleveland will be held in conjunction with the ISB meeting, tutorial planning is the responsibility of the ISB planning group. If you have ideas for tutorials in 2006 and beyond, send the topic and potential tutorialer (that's a new word for the presenter of a tutorial, I am glad that English is a constantly evolving language), send them to me.

Student Travel Awards This program of ASB has recently come under the auspices of the Education Committee. For the Portland meeting, ASB provided funding to 28 students to help offset the costs of attending the meeting. In prior years, ASB provided a fixed amount. The executive board decided to divide up the pool of available dollars among all applicants who submit a completed application by the due date. The pool of dollars is typically around \$1500-\$2000. With the low cost of student meeting registration, and the propensity of students to cram multiple bodies into a room, a student travel award offsets a lot of the meeting expenses. Of extra special interest, note that ISB also offers student travel awards; eligible students should be sure to apply to all possible funding sources for the 2005 meeting in Cleveland.

Successful Student Sessions at the Annual Meeting Past student rep Max Kurtz deserves a terrific round of applause from students

and from all ASB members for his exemplary work in developing, organizing and implementing the student sessions at the annual meeting. The sessions included the successful mentoring program, the Women in Science breakfast, and a filled-to-capacity student luncheon including a panel discussion. Some comments are offered on each.

Mentoring program: Briefly, the program allows a student to request being linked up with a biomechanist for the annual meeting. There were 35 pairings of students and mentors, and the initial feedback on the program is positive. All pairs met at least once, and in some cases extensive time was spent together. Students appreciated the networking facilitated by the mentoring program, which included meeting scientists and other students both professionally and socially through the mentor. With such a positive first go-round, it is hoped that the mentoring program will become an integral part of the annual ASB meeting.

Women in Science Breakfast: Not being female, I was not privy to this event. But, on my return from an early morning run, I walked by the room and can comment that, like other student-centered events, the event was well attended and people were engaged.

Student luncheon: The luncheon was standing room only, and arguments concerning the relative merits of a turkey versus ham boxed lunch ceased during the animated discussion. Discussion centered on a comparison of working in the business world compared to the academic world, how to get a position in industry, and the demands and risks inherent in an entrepreneurial swing in a career. The ASB extends hearty thanks to Toby Hayes, Tony Petrella, Erez Morag and Martyn Shorten for serving as panelists. At the luncheon, Melissa Scott-Pandorf from the University of Nebraska-Omaha was elected the new student representative.

On line Meeting Evaluation ASB went all electronic for the meeting evaluation this year. Using similar technology as in recent ASB elections, the evaluation survey was posted on a website and an instructional email was sent to meeting attendees. As with all technology, there were some bugs in the system, the primary complaint being that the technology required the survey to be posted on two pages. Despite warnings of this in the body of the email and in the survey itself, the second page was overlooked by approximately 25% of the respondents. So, we are working on formatting the survey, and hope to have a more efficient survey, one that even biomechanists can complete fully, for the future.

Happy Update: Regional Student Meetings The First Upper Midwest Student Regional Meeting of the American Society of Biomechanics was held on November 12 and 13, 2004 in Minneapolis Minnesota. ASB is proud to sponsor student meetings. The ASB will also support the fourth Southern California Conference on Biomechanics to be held at California State University in Fullerton, CA on April 22 and 23, 2005. As of the writing of this column on October 18, a third proposal for a student meeting is under review by the ASB Executive Board. If you are interested in hosting an ASB supported Regional Student Meeting, see the application details at the ASB website or contact me directly. The ASB has limits on funding available for any one regional meeting, but is committed to providing as much support as feasible. There are no deadlines for applications, so don't worry about missing one. Host one, you'll like it.

Welcome winter.

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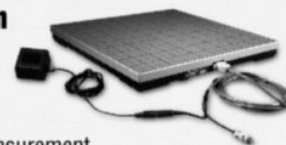
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Past President

Walter Herzog

As the Past-President of the ASB, I would like to encourage all students and postdoctoral trainees to apply for the Pre- or Post-doctoral Young Scientist Award. The Young Scientist Award session is always one of the highlights of the annual meeting, and many previous winners are now successful scientists. Also, I would encourage all of you to nominate fellow researchers for the Borelli and the Jim Hay Memorial Award. These awards are given to scientists who have conducted exemplary research and are leaders in their field.

Ground Rules:

Who can apply?

- ASB members are encouraged to consider nominating individuals whose work they admire.
- See individual award descriptions for specific requirements.
- Please contact me if you have questions on whether an individual would fit a category, or to discuss any other matters.

When to submit?

- All award (Borelli, Jim Hay, and Young Scientist) applications must be received by Walter Herzog by **January 31, 2005**
- Travel Award applications must be received by **July 1, 2005**

BORELLI AWARD: Deadline for submission is January 31, 2005: The Borelli Award, 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 open to all scientists, including non-ASB members, but excluding ASB officers and members of the Awards Committee. Candidates may be nominated by themselves or by others. Selection is based on originality, quality and depth of the research and its relevance to the **field of biomechanics**. A letter of nomination, a comprehensive curriculum vitae, and five publications on a single topic or theme must be submitted. The awardee is expected to attend the 2005 Annual Meeting of the ASB in Cleveland, in order to receive the award and to deliver the **Borelli lecture**. The award consists of an engraved plaque and a check for **\$1,500 (USD)**

Application instructions: Please submit 7 identical application packages in separate envelopes by the deadline of January 31, 2005. All envelopes should be labeled with your name and the award for which you are applying to. Six (6) of the envelopes are to be sealed and one unsealed.

JIM HAY MEMORIAL AWARD FOR RESEARCH IN SPORTS AND EXERCISE BIOMECHANICS: Deadline for submission is January 31, 2005:

This award was given for the first time at the ASB2004 meeting in Portland to the best abstract submitted in the area of Sports and Exercise Science Biomechanics. Based on the wishes of the Hay family and the ASB executive, the Jim Hay Memorial Award is given annually to an investigator who has conducted exemplary research in the area of Sports and Exercise Science biomechanics. The award is open to all scientists, including non-ASB members,

but excluding ASB officers and members of the Awards Committee. Candidates may be nominated by themselves or by others. Selection is based on originality, quality and depth of the research and its relevance to the **field of Sports and Exercise biomechanics**. A letter of nomination, a comprehensive curriculum vitae, and five publications on a single topic or theme must be submitted. The awardee is expected to attend the 2005 Annual Meeting of the ASB in Cleveland, 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 (USD)**.

Application instructions: Please submit 7 identical application packages in separate envelopes by the deadline of January 31, 2005. All envelopes should be labeled with your name and the award for which you are applying to. Six (6) of the envelopes are to be sealed and one unsealed.

YOUNG SCIENTIST AWARDS (Pre-doctoral and post-doctoral) Deadline for submission is January 31, 2005:

These awards recognize early achievements by promising young scientists. They are awarded annually to one pre-doctoral student and one post-doctoral student. Nominees for these awards must be current or pending members of the ASB at the time of submission. Candidates may be self-nominated or nominated by an ASB member. Both awards consist of an engraved plaque, a check for \$500 (USD), and a waiver of conference fees for the 2005 meeting.

Pre-doctoral Award: submitted materials must include a letter of nomination from the department head or graduate research advisor, a short description of the nominee's current research involvement (2 pages), a curriculum vitae, copies of published papers and/or submitted manuscripts (limit 5), and an abstract of original research submitted for presentation at the 2005 ASB annual meeting having the nominee as first or sole author. A student is considered eligible for the pre-doctoral award if they are someone who, on the deadline for submitting their nomination papers for the ASB Young Scientist Award (January 31, 2005) has not received his/her doctoral degree.

Post-doctoral award: submitted materials must include a letter of nomination, the nominee's curriculum vitae, copies of published papers and/or submitted manuscripts (limit 5), and an abstract of original research submitted for presentation at the 2005 meeting having the nominee as first or sole author. A person is considered eligible for the post-doctoral award if they are someone who, on the deadline for submitting their nomination papers for the ASB Young Scientist Award (January 31, 2005), is within 5 years of their graduation.

Application instructions: Please submit 7 identical application packages in separate envelopes by the deadline of January 31, 2005. All envelopes should be labeled with your name and the award for which you are applying to. Six (6) of the envelopes are to be sealed and one unsealed. Note that Young Scientist Award applicants also need to submit their abstract to the 2005 ASB Program chair (Dr. Art Kuo). Please refer to the ASB web page for abstract submission procedures <http://asb-biomech.org>.

TRAVEL AWARD- Deadline for submission is July 1, 2005: A Travel Award of up to \$1,000 (USD) is offered to foster collaborative research and interaction among scientists by helping

to offset the cost of travel to a host institution. All regular ASB members (i.e. not student nor corporate members) are eligible to apply. A cover letter describing the details of the planned project, a copy of the applicant's curriculum vitae, and an indication of the availability of any matching funds from the host's or candidate's institution (desirable but not required) should be submitted. The funding period is from July 1, 2005 through June 30, 2006. The recipient of the Travel Award is expected to present a poster of the funded project at the 2006 ASB annual meeting to be held at Virginia Tech.

STUDENT TRAVEL AWARD—Deadline for submission is July 1, 2005: The Student Travel Awards are based on demonstrated student status (letter from graduate advisor or department head), an accepted abstract (notification by 2005 Program committee). Previous Student Travel Award winners are excluded, and ASB student status is required. A copy of the submitted abstract, acceptance letter, and a letter from the student's faculty advisor indicating a need for assistance is required. Typically eight \$250 (USD) awards are granted.

Complete application packages for the Borelli, Jim Hay, Young Scientist and Travel Award should be mailed to:
Walter Herzog, Ph.D.
University of Calgary
Faculty of Kinesiology
2500 University Drive N.W.
Calgary, AB, Canada, T2N 1N4

Complete application packages for the Student Travel Award should be mailed to:
Steven McCaw, Ph.D.
Illinois State University
School of Kinesiology and Recreation
5120 Illinois State University
Normal, IL 61790

Other Awards:

ASB MICROSTRAIN AWARD

Microstrain, Inc. annually funds an award that recognizes superior achievement in the area of instrumentation. The award competition is open to scientists of any age and stage in their career (for example, undergraduate and graduate students, postdoctoral fellows, faculty and researchers) both in and outside the U.S. The award recognizes the individual's innovative application of existing instrumentation or have developed new instrumentation for use in the field of biomechanics. Candidates for the award must be the first or sole author on an abstract of original research submitted to the 2005 ASB meeting. Candidates for the award will be selected from the top 10th percentile of abstracts submitted to the ASB meeting, as evaluated by the ASB Program Committee. The ASB Awards Committee will then select two finalists from this pool for the award, and each of these two authors will present their work in a special ASB Awards session at the ASB annual meeting. The winner of each award will be selected by the ASB Awards Committee after this session. The award includes an engraved plaque and a check in the amount of \$1,000 (USD).

JOURNAL OF BIOMECHANICS AWARD

This award, sponsored by Elsevier Science, Ltd., publishers of the Journal of Biomechanics, recognizes substantive and conceptually novel mechanics approaches explaining how biological systems function. In addition to being ASB members, candidates for the award must be the first or sole author on an abstract of original research submitted to the 2005 ASB meeting. Candidates for the award will be selected from the top 10th percentile of abstracts submitted to the ASB meeting as evaluated by the ASB Program Committee. The ASB Awards Committee will then select two finalists from this pool for the award, and each of these two authors will present their work in a special ASB Awards session at the ASB annual meeting. The winner of each award will be selected by the ASB Awards Committee after this session. The award includes an engraved plaque and a check in the amount of \$500 (USD).

CLINICAL BIOMECHANICS AWARD

This award recognizes outstanding new biomechanics research targeting a contemporary clinical problem, and is sponsored by Elsevier Science, Ltd., publishers of Clinical Biomechanics. In addition to being ASB members, candidates for the award must be the first or sole author on an abstract of original research with special relevance for clinical applications submitted to the 2005 ASB meeting. Candidates for the award will be selected from the top 10th percentile of abstracts submitted to the ASB meeting, as evaluated by the ASB Program Committee. The ASB Awards Committee will then select two finalists for the award from this pool, and each of these two authors will present their work in a special ASB Awards session at the ASB annual meeting. The winner of each award will be selected by the ASB Awards Committee after this session. The award includes an engraved plaque and a check in the amount of \$500 (USD).

PRESIDENT'S AWARD

Following its successful inaugural year at the 2003 Toledo ASB meeting, we are again encouraging submissions for the President's Award. Its goal is to recognize meritorious research involving "highly innovative use of experimental or theoretical methods in any field of biomechanics" that is presented as a poster at the annual ASB meeting. Candidates for this award must be the first or sole author on an abstract of original research submitted as a poster to the 2005 ASB meeting. Candidates for the award will be selected from the top 10th percentile of posters presented at the ASB meeting, as evaluated by the ASB Program Committee. The winner of this award will be selected by the ASB Awards Committee after the poster session is concluded, and will be announced at the meeting together with the other awards. The award includes an engraved plaque and a check in the amount of \$500 (USD).

Submission Procedures:

No specific application package is required in order to be considered for the **ASB Microstrain Award, Journal of Biomechanics Award, Clinical Biomechanics Award, and the President's Award**. These awards are selected by the Awards committee based on the top 10% of all submitted abstracts. Once you have submitted your abstract, you will be considered for these awards. For abstract submission deadline, please refer to the ASB website at <http://asb-biomech.org>.

Business Meeting Minutes

Minutes

American Society of Biomechanics
2004 Annual Business Meeting
5:00PM, September 9, 2004, Portland, Oregon

Meeting called to order by ASB President Walter Herzog at 5:10 P.M. PST. Total attendance, approximately 100.

Approval of Minutes: Walter asked for a motion to approve the minutes from the 2003 Annual Business Meeting in Toledo (*R. Hinrichs moved, S. Delp seconded*). The motion carried.

Program Chair Report: Steve Robinovitch briefly described the abstract review process for the Portland meeting. Approximately 19% of the 360 received abstracts were rejected based on reviewer score. In the past, the ASB policy has been to allow the Program Chair great latitude to set the policy for that year. Steve noted that his decision this year was based on his desire for scientific quality in the program rather than space limitations. Nick Stergiou expressed surprise regarding the rejection rate compared to past years (usually < 5%). Steve described the ranking process: two reviewers ranked each abstract from 1 to 5 (low to high), those with an average score of ≤ 2 were not included in the program. Walter noted that the XB fully supports Steve's decision for this year but is aware of the broader issue of 'inclusiveness' for the society. Rick Hinrichs noted that he was in support of continuing the process as a means of improving the scientific quality of the meeting. Several members noted views both in favor and against the system utilized this year. Walter summarized the pros and cons and indicated the XB would stay involved in the process during future years. Walter closed by thanking Steve for his efforts this year.

Meeting Chair Report: Michael Bottlang gave a brief report on the meeting. As of Thursday afternoon, 488 had registered for the meeting. With regard to income for the meeting, Michael anticipates that the combination of registration fees, sponsor pledges (\$20k), support from NIAMS (\$13k), The Whitaker Foundation (\$8k to defray student expenses), and exhibitor fees (17 exhibitors) should yield a total income of approximately \$100k for the meeting. Michael anticipates that total expenses will be approximately \$80 to \$85k. He noted that 280 attendees went on the planned tours and approximately 150 attended the combined tutorials. Michael closed by noting that the meeting organizers chose to hold the meeting at a conference facility to enhance interactions (in contrast to previous meetings on university campuses) and felt that this has been a positive environment for the meeting. Walter thanked Michael for his outstanding effort as Meeting Chair.

Secretary/Treasurer Report: Ted noted that after a single year dip of 12% total ASB membership stands at slightly over 600 for 2004 as of the annual meeting and should finish the year at levels

similar to past years (approximately 615). Ted felt that the dip in 2003 was primarily due to the transition to electronic communication with the membership. J Biomechanics subscriptions have declined by approximately 50% compared to the last year of mandatory subscription (2002) but are the same as 2003. At these levels of subscription, it appears that the J Biomechanics subscription rates will increase annually at rates similar to those experienced during mandatory subscription. With regard to the financial status of the society, total society funds have reached all-time highs. Compared to year end 2003, total society funds have appreciated 5.6% to approximately \$151k. This represents a 38.6% increase since year end 2002. During 2004, increased funding of awards has partially offset a 15% increase in cash (primarily due to establishment of the Hay endowment). Investments returns for 2004 are up 2.6% to date. The society currently holds \$64k in cash or equivalents (excluding the Hay Award). Ted anticipates that excluding any cash gains or loss from the Portland meeting, that cash and equivalents will stand at approximately \$60k following the meeting. Ted closed by noting that serving the society and interacting with the members over the past three years (with the exception of taking minutes ...) has been a great experience. Walter thanked Ted for his service as Secretary-Treasurer.

Membership Committee Chair: Juliannne Abendroth-Smith reported that there was a substantial increase in membership applications associated with the annual meeting and that the membership committee attempted to process applications as quickly as possible. She also noted that the membership committee is currently considering strategies to simplify the transition from student to regular member.

Education Committee Chair: Steve McCaw reported that the ASB has sponsored 1 regional meeting (Minneapolis, November 12 and 13) and 5 Grant-In-Aid applications for 2004. He noted that the meeting evaluation will be online this year and encouraged everyone to participate. Steve then thanked the tutorial speakers (Walter Herzog and Rick Leiber) for their efforts. Steve briefly described the 2004 travel award program and noted that the deadline for 2005 award applications will be more clearly defined. Steve closed by recognizing the outgoing student representative, Max Kurz, for his outstanding efforts. Max was able to initiate both a Women in Science breakfast and a mentoring program this year at the meeting. Melissa Scott-Pandorf was elected as the new student rep at the student luncheon.

President's Report: Walter began by noting that his primary goal this year has been to formally establish the Jim Hay Award for excellence in exercise science, which was awarded for the first time at the Portland meeting. Walter spoke briefly about upcoming plans for the 2005 joint meeting with the ISB in Cleveland. The current schedule has Thursday as the day for ASB awards and meetings. ASB hopes to be able to partially defray student registration fees which will be much higher than for ASB meetings. He also noted the current plans are for a joint NACOB meeting in 2008. Walter then recognized Max Kurz for his efforts over the past two years as the student representative to the Executive Board, and Joanie Bechtold for her considerable efforts as Past-President as chair of the nominating and awards committees. Walter then

passed the gavel to Trey Crisco as the new ASB President. Trey, in turn, recognized Walter for his efforts this year.

Nominating Committee: Trey noted that the Executive Board had identified two potential members for the nominating committee: Bob Gregor and Tom Brown. Trey took two additional nominees from the floor: Nick Stergiou and John Elias. Following a floor vote, B. Gregor and T. Brown will serve on the 2005 nominating committee.

Additional Business: Don Anderson (taking over as Secretary-Treasurer effective this meeting) announced the elections results: Ted Gross will be the 2005 President-Elect, and Irene McClay-Davis will be the 2005 Program Chair. Irene will share the duties with Joe Hamill.

Rich Hinrichs noted that having the posters up for the entire meeting was viewed by many as a strong feature of the meeting and encouraged the society to continue this trend.

At 6:05 PM a motion to close the meeting was made by Walter Herzog, seconded by Don Anderson.

Respectfully Submitted
Ted S. Gross, Ph.D.
ASB Secretary-Treasurer

Paid Job Listing

TENURE-TRACK FACULTY POSITION
Department of Mechanical Engineering
Look College of Engineering
TEXAS A&M UNIVERSITY

The Department of Mechanical Engineering at Texas A&M University invites applications for a tenure-track faculty position in the **Mechanics Division**. Applicants are sought primarily at the Associate or Full Professor level, but an Assistant Professor will also be considered. Applicants must have an earned doctorate, by the date of appointment, in Mechanical Engineering or an appropriate closely-related discipline. Expertise is desired in experimental mechanics and biomechanics, especially with interests in emerging areas such as biomaterials, tissue engineering, hemodynamics, cell mechanobiology, and nanobiomechanics. The successful applicant will be expected to develop an independent, externally funded research program, and to participate in all aspects of the department's mission. Strong written and verbal communication skills are required. Applicants should consult the department's web page to review our academic and research programs (www.mengr.tamu.edu). Applicants will be evaluated based on current credentials and potential for future impact. It is anticipated that the appointment will begin fall 2005.

Research collaboration opportunities abound both locally, through the College of Veterinary Medicine and the Texas A&M Health Science Center, and regionally through the Texas Medical Center in Houston. The University is also planning a new \$100 million interdisciplinary life sciences teaching and research facility on the main campus.

Applicants should mail a complete resume, a one-page statement of research and teaching interests, and a list of three references including their postal addresses, telephone numbers and e-mail addresses to:

Biomechanics Faculty Search Committee
c/o Dr. Harry Hogan
Department of Mechanical Engineering
Texas A&M University, 3123 TAMU
College Station, TX 77843-3123

Applications will be accepted until the position is filled.

Women and other under-represented minorities are especially encouraged to apply. Texas A&M University is an Equal Opportunity and Affirmative Action Employer.

Past Program Committee

Steve Robinovitch

Dear ASB members:

Greetings from Vancouver! It was my distinct pleasure to serve as Program Chair for the 2004 Annual Meeting of the ASB in Portland this past September. While the job kept me busy over the spring and summer, it was a very rewarding experience.

By all measures, the conference was a great success. Attendance was excellent, and we enjoyed a record number of podium and poster presentations, which reflected the high quality and diversity of our research endeavors. Many presentations were provided by graduate students, who showed that the future of biomechanics is in great hands.

I am grateful to many people who contributed to the success of the conference. These include our keynote speakers (Steven Vogel, Wilson "Toby" Hayes, Andrew Schwartz, and Farshid Guilak) and the award winners and nominees (including our Borelli winner, Thomas Andriacchi), who provided educational and entertaining talks. I also wish to extend my thanks to the symposia organizers (Yasin Dhaher, Francisco Valero-Cuevas, and Walter Herzog), members of the Program Committee (Walter Herzog, Rodger Kram, Arthur Kuo), and the approximately 30 individuals who reviewed abstracts. Special thanks go to Michael Bottlang, who as Meeting Chair often kept me on track, and did a wonderful job in organizing local activities. Finally, I wish to thank my co-worker Tara Sloan, who provided invaluable assistance in organizing the program.

I look forward to maintaining strong ties with the ASB, and seeing many of you next summer as we join the ISB in Cleveland.

Best regards



Historical Perspective - How ASB Began

Jim Hay

Editor's Note - This article first appeared in the ASB newsletter 15 years ago.

Jyväskylä, Finland, July 2 1975 - During the Vth International Congress of Biomechanics twenty-two scientists from the U.S. met to consider the founding of an American Society of Biomechanics. This meeting followed a series of informal discussions held over the previous several years that had identified a need for a broad discussion of the pros and cons of forming an American Society. Dr. James Hay served as the chairman of the session, beginning a role with several others that was instrumental in the formation of the society. Suggestions were made to combine with the newly formed Canadian society or with the American College of Sports Medicine, but it was decided that a neutral ground would be more advantageous. A tentative name of the United States Society of Biomechanics was adopted and suggestions for individuals to be on a working committee were obtained, with Dr. Hay elected as Chairman protem and Gary Soderberg as interim secretary.

Chicago, January 15, 1976 - The working group met to begin development of the Society and consisted of Richard A. Brand, Don B. Chaffin, F. Gaynor Evans, James G. Hay, Albert B. Schultz, and Gary L. Soderberg. To identify the need for and interest in an American Society of Biomechanics (the name United States Society of Biomechanics had evidently evaporated by this time), the group identified a variety of journals they would ask to publish a notice about the formation of such a society. It was agreed that the prime function of the society would be to bring together biomechanics researchers in diverse fields for the purpose of exchanging information of mutual or common interest. The focus of the society was to be on research rather than teaching, and attempts would be made to avoid duplication with organizations already operational. A definition of biomechanics proposed by Hatze (J. Biomech. 7:189-190, 1974) was adopted, which stated: "Biomechanics is the study of the structure and function of biological systems by means of the methods of mechanics." The group decided on a general format for a meeting and chose October of 1977 for the first meeting to be held in the Mid-West. Affiliation with the Journal of Biomechanics was set as a goal, with a newsletter to come from ASB. At the time two categories of membership were envisioned, a full active member with formal training and/or experience, and an associate member with interest and active involvement with biomechanics research.

Chicago, May 26, 1976 - By this time 78 inquiries and intonation sheets had been received from interested persons. Two letters expressed concern over the foundation of another society: one concerned with the inclusion of biological entities into AS; the other raising the question of possible duplication of ASB with ASME. The working group still felt that the scope of all other organizations were much more limited than the intent of the ASB. Discussion was held concerning the first meeting of ASB and

Iowa City was selected over Detroit and Chicago. A format was selected for the meeting, much the same as it still is today. While some sources of funding for the Society had been investigated, it was eventually decided that ASB could probably be self-sustaining from the outset. A draft of a constitution prepared by Evans was discussed.

Chicago, November 5, 1976 - Interest in the Society had continued to grow, with 147 responses received. One newsletter had already been distributed, and plans for a second that would update interested parties concerning the development of the Society and plans for the first meeting were drawn up. Eighty-five potential members reported their primary disciplines as: medicine 21 (15 in orthopedics); engineering 25 (12 in mechanical); biological sciences 9; physical education 24; ergonomics 3; others 3. Plans for the initial meeting in Iowa City projected 50 attendees plus additional students and the \$25 registration fee projected a \$1250 budget, a little over 10% of that for the 1988 meeting. Two departments at the University of Iowa committed to underwrite the budget should the meeting prove to be a financial loss. Guest speakers were selected along with the decision not to provide honorarium or cover expenses, and plans were made to distribute a book of abstracts. A blind review of abstracts was planned. The constitution for the Society was discussed and modified. It was agreed that a Charter Members category be instituted and that participants in the first regular meeting would be Charter Members. Honorary and Emeritus member categories were agreed upon (formal guidelines for these categories were just approved by the Executive Board in 1988), and the break-up into disciplinary categories for the purposes of officer selection was approved. A procedure for the President, Past-President, and Vice-President to be from different disciplines was agreed upon.

Iowa City, October 17-19, 1977 - The founding meeting for ASB convened with approximately 70 potential members present. The activities of the organizing committee and current status of the Society were discussed, and a slate of officers drawn up by James Hay were unanimously approved for the Society's initial year of existence. F. Gaynor Evans was elected as the first President of the Society, with Albert Burstein designated as President-Elect. Savio Woo as Secretary-Treasurer, Richard Brand as Meeting Chairperson, Albert Schultz as Program Chairperson, and James Hay as Chair of the Nominating Committee rounded out the first year's elected officials. The First Annual Meeting was held in the Iowa Memorial Union and consisted of 17 free communication papers and three keynote presentations. Doris Miller, Albert Burstein, and Carl Gans were the invited speakers, and the papers were spread over a day and a half in six sessions, none of which were concurrent.

These Go to Eleven

Andy Karduna

On the preceding page is an article written by Jim Hay in 1989 that tells the story of the formation of the American Society of Biomechanics. I found it particularly interesting that 5 out of the 6 members of the original working group eventually became president of the society. I also noticed that a pre-society newsletter was distributed in 1976. If anyone has this newsletter, I would certainly like to get my hands on a copy.

In the same issue, the editor, Keith Williams, attempted to provide an assessment on how well individual universities were doing in representing the growth and diversity of the society. Growth was assessed based on the number of ASB members and diversity on the number of disciplines represented. At that time, the University of Michigan was atop both lists, having 18 members with representation from all 5 disciplines of the society. Although a couple of universities had members from 4 disciplines, the next highest in total members only had 8. For the record, the ASB disciplines are: Engineering and Applied Physics, Health Sciences, Ergonomics and Human Factors, Exercise and Sport Science, and Biological Sciences.

To see how things have changed in the past 15 years, I pulled up the current member database and repeated the analysis. There are now two universities with members from all 5 disciplines: Michigan

and Penn State. As far as members, I'm sorry to say that Michigan has dropped to number 2, with 17 members. Bragging rights now belong to UC Davis, with 18 members. University of Calgary rounds out the top three with 15 members. I have created a table below with the top 11 (of course) schools from 1989 and 2004.

These ranking are not without some degree of controversy and have apparently sparked a bitter debate between Michigan and UC Davis. Members are asked to select their own discipline and there is no oversight on this process. It turns out that the only discipline UC Davis is missing is Biological Sciences. Yet, Dan Ferris is the only ASB member from Michigan who falls under this discipline. Is Dan really doing research in the biological sciences? The Executive Board may have to schedule a series of site visits to verify this. Location is also an issue. For example, there is one member from UC Davis with an address in Nevada, as well as, several ASB members with no listed school affiliations, but with addresses in Ann Arbor. Curious. Watch for an appeal from Michigan – I wouldn't be surprised if this made it all the way to the United States Supreme Court (since they will sitting out of this year's presidential election).

Of course, the contribution of a university to the ASB is clearly more complex than a simple numbers assessment can reveal. For example, do members attend and present at meetings regularly? Do they serve the society as members of the executive board? Do they win society awards? These are all important benchmarks.

But there is an even more important question to be asked. As long as we are on the topic of awards, I was wondering if the folks from Stanford are going to let anyone else up on the podiums next year?

Rank	School	1989 Members	School	2004 Members
1	University of Michigan	18	UC Davis	18
2	UC Davis	8	University of Michigan	17
3	University of Iowa	8	University of Calgary	15
4	Wisconsin	8	Stanford University	13
5	Stanford University	7	University of Iowa	12
6	Penn State University	7	Penn State University	11
7	Case Western	7	University of Delaware	11
8	University of Calgary	6	USC	9
9	Michigan State	6	University of Colorado	8
10	UCLA	6	University of Pittsburgh	8
11	University of Cincinnati	6	Simon Fraser University	7

Grad Student Grant-in-Aid

Steve McCaw

The purpose of the Graduate Student Grant-In-Aid Program is to aid and encourage student members of ASB to pursue 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 pending no later than January 1, 2005. Applications must be submitted by electronic mail (Word or ASCII text only, *no* PDF materials are acceptable) by midnight January 15, 2005. The application must identify: 1) the significance of and need for the research, 2) specific aims and hypotheses to be examined, 3) a succinct overview of the methods to be employed, 4) an itemized budget, 5) a curriculum vita of the applicant, 6) a letter of recommendation from a faculty advisor/supervisor, 7) a correct mailing address, and 8) the name and address of the fiscal agent at the institution responsible for handling any grant funds provided. Sections 1 to 4 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. The Education Committee of the American Society of Biomechanics will review applications, with funding distribution expected by June 1, 2005.

Applications and inquiries should be submitted to:

Steven T. McCaw, Ph.D

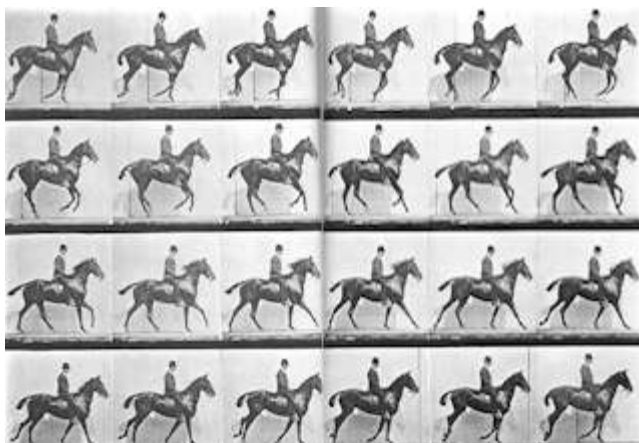
Chair, ASB Education Committee

School of Kinesiology and Recreation

Illinois State University

email: smccaw@ilstu.edu

Email subject: 2005 ASB GIA



Commercial Members

Commercial 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. Based on the level of financial support required and upon benefits provided, commercial membership categories in decreasing order are Sustaining Member, Supporting Member, Contributing Member, and Corporate Member. Companies wishing to become a Commercial Member are encouraged to contact Julianne Abendroth-Smith, Membership Committee Chairperson. The ASB Executive Board is pleased to recognize:

CORPORATE MEMBERS

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Orthofix, S.R.L.

Peak Performance Technologies, Inc.

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Jobs Postings

ASSISTANT/ASSOCIATE PROFESSOR IN EXERCISE SCIENCE. Ph.D. in biomechanics, sports medicine/athletic training, or physical therapy required. Research interests in clinical biomechanics, evidence of scholarly publications in peer-reviewed journals, ability to establish an independent research program and collaborate with current faculty in research, and a commitment to obtaining external funding for research required. Appropriate credentials in physical therapy and/or athletic training, university teaching experience, the demonstrated ability to obtain external funding for research, and post doctoral training desired. Apply with cover letter, curriculum vitae, and contact information for three references to: Chair, Exercise Science Faculty Search Committee, Department of Exercise, Sport, and Leisure Studies, The University of Tennessee, 1914 Andy Holt Avenue, Knoxville, TN 37996-2710. Inquiry can be made at 865-974-9045 (office).

Calendar of Events

William Ledoux

Conference of the Society for Physical Regulation in Biology and Medicine

January 11-14, 2005, South Lake Tahoe, California
Abstract deadline - past
www.sprbm.org

IASTED International Conference on BME

February 16 - 18, 2005, Innsbruck, Austria
Abstract deadline - past
iasted.org/conferences/2005/Innsbruck/biomed.htm

Annual Meeting of the Orthopaedic Research Society

February 20-23, 2005, Washington, DC
Abstract deadline - past
www.ors.org

Annual Meeting of the Gait and Clinical Movement Analysis Society

April 6-9, 2005, Portland, Oregon
Abstract deadline - past
www.amrinc.net/gcma/2005/index.cfm

Rocky Mountain Bioengineering Symposium

April 8-10, 2005, Copper Mountain, Colorado
Abstract deadline - past
www.rmbs.org

Meeting of the American College of Sports Medicine

June 1-4, 2005, Nashville, Tennessee
Abstract deadline - past
www.acsm.org/meetings/annualmeeting.htm

European Workshop on Movement Science EWOMS

June 2-4, 2005, Vienna, Austria
Abstract deadline - December 20, 2004
www.vu-wien.ac.at/i111/www/EWOMS-2005/welcome.html

Summer Bioengineering Conference

June 22-26, 2005, Vail, Colorado
Abstract deadline - January 10, 2004
www.asme.org/divisions/bed/events/summer05.html

International Conference on Rehabilitation Robotics

June 28 - July 1, 2005, Chicago, Illinois
Abstract deadline - February 4, 2005
www.smpn.nwu.edu/ICORR2005

Annual Meeting of the International Functional Electrical Stimulation Society

July 5-9, 2005, Montreal, Canada
Abstract deadline - March 14, 2005
www.ifess2005.org

Congress of the International Society of Biomechanics in conjunction with the annual meeting of the American Society of Biomechanics

August 1-5, 2005, Cleveland, Ohio
Abstract deadline - January 31, 2005
www.isb2005.org or www.asb-biomech.org

International Symposium on Biomechanics in Sports

August 22-27, 2005, Beijing, China
Abstract deadline - April 1, 2005
www.cssb2001.net/isbs2005

Biomechanics of Lower Limb in Health, Disease and Rehabilitation

September 5-7, 2005, England
Abstract deadline - March 31, 2005
www.healthcare.salford.ac.uk/crhpr/biomech2005.htm

Annual Meeting of the Human Factors and Ergonomics Society

September 26-30, 2005, Orlando, Florida
www.hfes.org/meetings/menu.html

International Conference on Mechanics of Biomaterials & Tissues

December 11-14, 2005, Waikoloa, Hawaii
Abstract deadline - April 1, 2005
www.icmobt.elsevier.com

6th Conference on Engineering of Sport

July 11-16, 2006 Munich, Bavaria, Germany
Abstract deadline - tbd
www.sportkreativwerkstatt.de/isea2006.de.htm

World Congress of Biomechanics

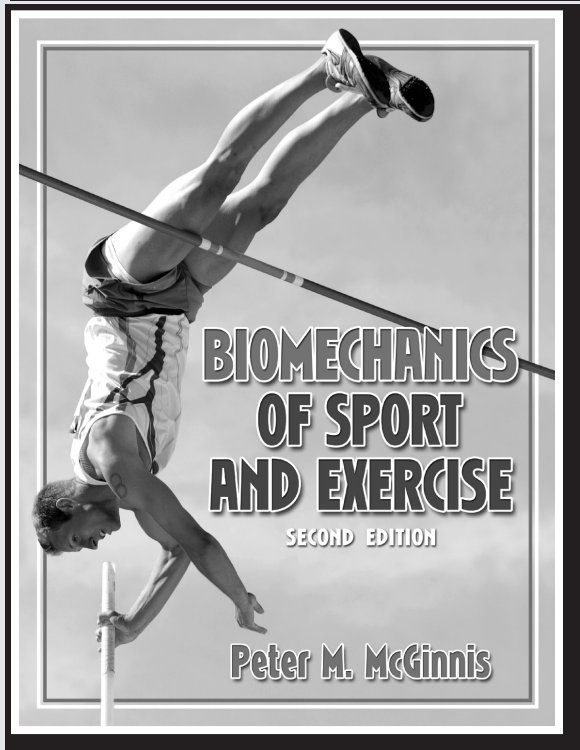
July 29th - August 4th 2006, Munich, Germany
Abstract deadline - January 15th, 2006
www.wcb2006.org

International Symposium on the 3-D Analysis of Human Movement

Valenciennes, France, 2006 (exact data tbd)
pe.usf.edu/3D-HumanMovement

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

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10/04