American Society of Biomechanics
Newsletter

Vol. 20 June 2007 No. 1

www.asbweb.org

From the President

Kenton Kaufman

Remember the movie "Back to the Future"? Envision what it would be like to go back to October 18, 1977 in Iowa City when The American Society of Biomechanics was founded by a group of 52 scientists and clinicians for the purpose of stimulating and fostering research, discussion, and exchange of ideas among society members working in the various areas of biomechanics. The key feature of this mission was to bring together researchers from diverse disciplines and to provide them with the opportunity to interact. At that first meeting, three distinguished biomechanics researchers gave keynote presentations. Doris Miller talked about "Biomechanics of Sports Medicine: What should the future hold?". Albert Burstein discussed "Failure Characteristics of Human Bone". Carl Gans presented a "Biomechanical interpretation in functional morphology". It would have been exciting to be there and build closer communication with individuals and groups in other application areas of biomechanics and advance cooperative research.

You will get to fulfill that dream of going back in time this year when the annual meeting marks the 30th anniversary of the founding of the society. You will meet the founding members of the society and learn from them about their vision for the society, changes they have seen over the past three decades, and where they predict the society will be in 2037. Scott Delp and Chris Jacobs, Conference Co-Chairs, and Francisco Valero-Cuevas, Program Chair, have planned an exciting meeting. Stanford is an excellent site for the annual meeting and I know that you will enjoy being on campus. The venue will feature a wonderful combination of an outstanding scientific program paired with enjoyable social and recreational opportunities.

The regional meetings continue to be a success. Meetings have been held in the Northeast, Southeast, and Northwest this year. These are an excellent opportunity for students to present their work. They are also a great opportunity for social interactions as well as student and faculty networking. Sponsorship of these meetings is greatly appreciated and range from local corporations and institutions to international vendors.

The international biomechanics community was affected greatly by two incidents of violence this year. On December 6, 2006 long-time ASB member, Tony Keller was fatally shot in his apartment complex in Tampa, Florida. Then, four months later on April 16, 2007 the entire nation was saddened by the shootings at Virginia Tech. Among the victims was one of our eminent biomechanics colleagues, Kevin Granata. These tragedies challenge our ability to understand the world in which we live. As scientists, we seek rational explanations but don't find any satisfying answers to these irrational acts. The fact that 32 people could die in such a way on the Virginia Tech campus dedicated to the education, nurturing and development of young people defies logic. We send our condolences to the family members, students, staff, and faculty of both these outstanding scientists. Plans are underway to commemorate the loss of both Tony and Kevin at our annual meeting in August.

Finally, I encourage you to contact me with any suggestions you may have to improve our society. I hope to see you at Stanford this August.

ASB NEWSLETTER
volume 20, number 1

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In this issue ...

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

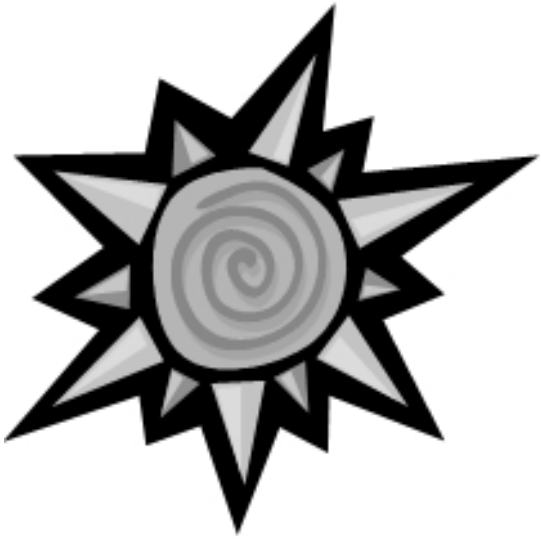
If you are interested in learning more about advertising in the ASB newsletter, please e-mail William Ledoux at:

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



Student's Corner

Katie Bieryla

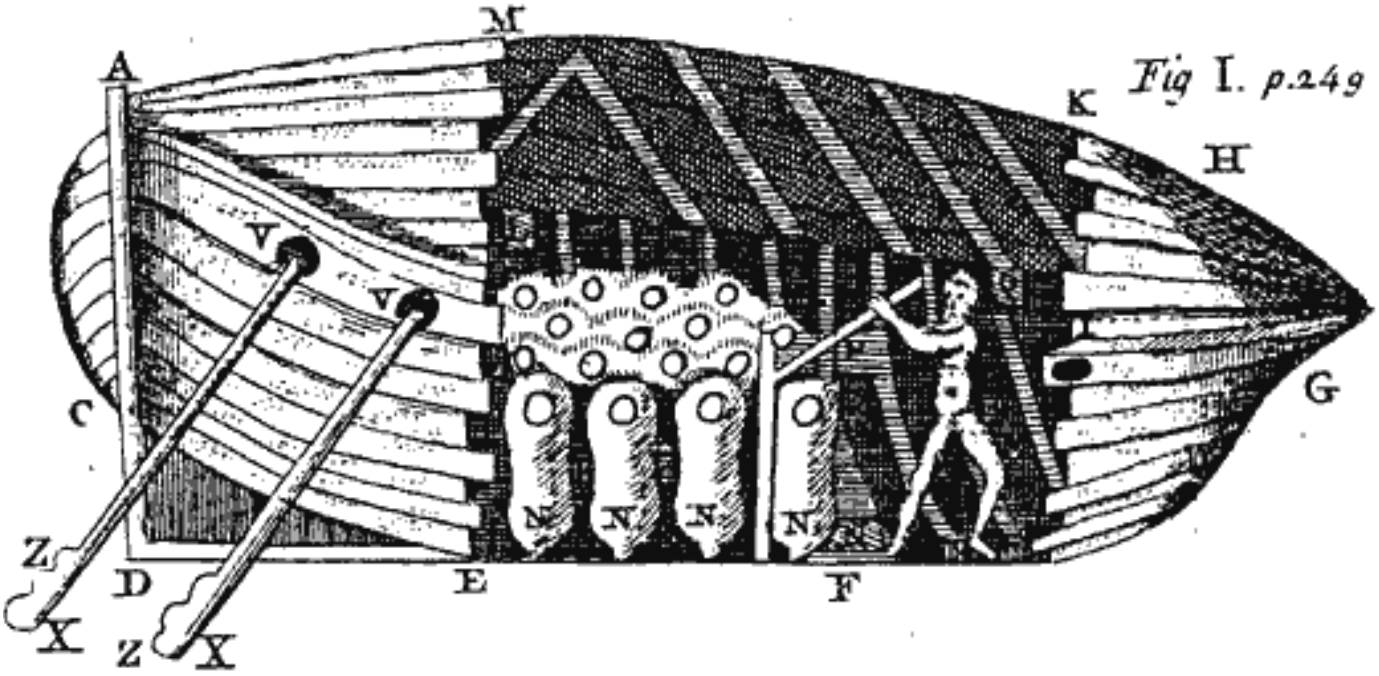
The end to this spring semester has been extremely difficult. As all of you must know by now, a great tragedy occurred on April 16th at Virginia Tech resulting in the loss of 32 lives. Of these was a beloved member of the biomechanics community, and co-Director of my research lab, Dr. Kevin Granata. Dr. Granata was a great inspiration, friend, and mentor to all of the students in our lab, and he is sorely missed. His legacy will live on in all of us as we continue with the research that he inspired us to do. The Virginia Tech community has received incredible support from around the world. Please allow me to express a personal 'Thank You' for all of this support, and to ASB for your encouragement in such dark times. For one day we were all Hokies.

It's time to start thinking about the ASB annual meeting. In only a few short months, we will meet in Stanford, CA to celebrate the 30th anniversary of the formation of ASB. To commemorate this anniversary, the student lunch will take a different form. Our goal is to invite founding members of ASB to openly discuss the past, present, and future of biomechanics as they see it. It will be a great opportunity to meet people who have paved the way for biomechanics as we know it in 2007.

The Women in Science lunch is tentatively scheduled for Saturday of the meeting. It will be similar to last year's lunch which seemed to have great success. I am working on having a variety of female scientists at various points in their careers to give a broad view of the female perspective in the biomechanics field.

Another program that will be continued again this year is the mentor program, in which students are paired with a senior scientist. The goal is to encourage interaction between students and senior scientists in an informal setting to discuss career goals, research, or even life after graduate school. If you are interested in participating, please email me (kbieryla@vt.edu) by June 30 with information on your area of interest, and if there is a particular person you would like to be in contact with. I will do my best to match students and scientists with similar backgrounds.

Lastly, I would like the students to be able to get together in a less formal setting. I hope to be in contact with some students at Stanford and set up a student night out at a local place. If you have any additional ideas for student events at the conference feel free to contact me. Enjoy the start of summer, and I look forward to seeing you in August!



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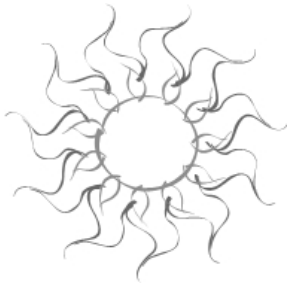


Education Committee

Steve McCaw

We have all been affected by the tragedy at Virginia Tech. It has been hard to resolve my images of the tranquil and beautiful campus during last fall's meeting with the images of frantic victims and swarming police. My condolences and best wishes go out to all VT personnel and families.

ASB Graduate Student Grant-in-Aid Program

The Grant-in-Aid program received thirteen applications, far more than this program has ever received or expected, and far more than I promised to the individuals I recruited to serve on the Review Committee. I want to thank the committee members for the thorough and efficient job they did of ranking the very competitive applications- student rep Dr. Becky Zifchock, University of Delaware (the Dr. is relatively new; Becky defended her dissertation April 5), Dr. Lorin Maletsky (University of Kansas), Dr. Jean McCrory (University of Pittsburgh), and Dr. Karen Troy (University of Illinois-Chicago). The ASB Executive Board is pleased to announce funding for the following projects:

Deanna Gates, University of Texas at Austin: *Tracking Fatigue-Related Changes in Motor Coordination*

Amy Silder , University of Wisconsin-Madison: *Dynamic Imaging of the Hamstrings During a Stretch-Shortening Cycle*

Ross H. Miller, University of Massachusetts Amherst: *A Subject-Specific Musculoskeletal Model of the Iliotibial Tract*

Robert Catena, University of Oregon, *The effects of executive functioning on gait stability following mild traumatic brain injury*

Joseph Soltys, University of Kansas, *Investigating the Role of the Central Nervous System in the Integration of Proprioceptive Information*

The next deadline for this increasingly competitive program will be January 15, 2008. Details on the application process will be posted on the ASB website and provided in the fall newsletter.

Regional Student Meetings

The ASB Executive Board supported three regional meetings this Spring. Reports from two of these meetings are located elsewhere in the newsletter.

The ASB executive board discussed the future of the regional meetings at its annual meeting in February. For the next four years, the ASB intends to provide support for up to four regional meetings each year. Maximum financial support for an individual meeting will be $2,000. ASB has sponsored three regional meetings in each of the past three years, and the increasing attendance and interest in hosting regional meetings warrants the additional ASB support. The $8,000 will come from ASB funds. The effectiveness of ASB support of the meetings will be evaluated primarily through feedback from the hosts and evaluation of membership records.

There will be a September 30 deadline for applications to host a regional meeting. It is recommended that regional meetings be held between December 1 and May 31, to avoid interference with the ASB annual meeting. For the immediate future, priority will be given to proposals coming from regions that have not previously hosted a meeting. Proposals from previously funded regions will be awarded on a first arrive, first funded basis. If you are interested in hosting a regional conference, contact me ASAP so we can get your application process underway.

ASB did not take clear action on defining the regions. Sponsors of a new regional meeting should specifically include ASB in the title (*i.e.* Texarkana regional ASB meeting). Regions that have been using a name for previous meetings will be encouraged to include ASB in the title as long as the change does not make the new title too unwieldy.

Other Notes

This is my last column as Education Committee Chair. It has been a wonderful experience for the past several years, and has reinforced to me the importance of ASB as the society best positioned to advance biomechanics. If you get the opportunity to serve, step up. Only good things come of it.

See you in Palo Alto. Until then, keep your stick on the ice.

Secretary/Treasurer

Don Anderson

As of April 27th, funds in our cash accounts totaled $43,265.69, while investments stood at $146,980.48. To put the cash accounts balance in context, though, please consider that we have $15,702.50 in journals subscription bills we will soon be paying, and $9,500 soon to be paid out in support of the Grant-in-Aid program. Nonetheless, ASB clearly remains in a healthy financial state.

We have nearly completed processing membership dues renewals. Roughly 585 of you have renewed your memberships to date (that last e-mailing of mine, with the ominous FINAL NOTICE in it seems to have finally motivated some of you – sorry (not) if I scared you). As I have commented on more than one occasion in the past, it is always nice to put this hectic time of the ASB Sec/Treas year behind us. It is especially gratifying in this, my final year of S/T service.

For those of you holding your breath after reading the last newsletter, I did not have to dip into our investments this Spring. It seems I was being a bit Chicken Little-ish in my outlook. But it is always nice to know that we have a bit of a nest-egg tucked away, just in case.

Since this is my final newsletter as Sec/Treas, I would like to thank all of you for granting me the opportunity to have served the Society in this capacity. The experience has been, for the most part, a very pleasant one. I have enjoyed getting to interact with you all, and becoming all the more familiar with the inner workings of the ASB. I would like to personally thank Ted Gross, who supported me early on, and commiserated with me on many occasions. ASB is a great and healthy Professional Society, and I can proudly say that the future of the Society looks very bright.

All the best to you all!

Past-President

Ted Gross

I would like to briefly update the membership on the progress of the 2007 Awards Committees. Due to the later submission deadline this year, assessment of the Borelli, Hay, and Young Scientist Award submissions has just begun. As the Past-President, it is my privilege to serve as the non-voting Chair for each of the Awards Committees. As such, I am responsible for recruiting members to serve on the Committees and for administrating the process. Each committee member independently reviews the appropriate material and submits her/his vote electronically to the Chair without discussion amongst the committee members. The recipient/finalist of each award will be determined via the highest average score as tabulated by myself. If an average ranking is identical for two candidates, the smallest range of scores will serve as a tie-break.

The 2007 Borelli Award Committee includes (discipline noted): Peter Cavanagh (Health), Don Chaffin (Ergonomics), Ken Kaufman (Engineering), Rodger Kram (Biology), and Jill McNitt-Gray (Exercise), while the 2007 Hay Award Committee is comprised of Peter Cavanagh (Health), Mark Redfern (Ergonomics), Ken Kaufman (Engineering), Rodger Kram (Biology), and Phil Martin (Exercise). I would also like to acknowledge those members that have agreed to participate in assessing Young Scientist and/or abstract based awards (Journal of Biomechanics, Clinical Biomechanics, and Microstrain): Seth Donahue (Engineering), Bob Gregor (Biology), Dan Ferris (Biology), Melissa Gross (Exercise), Kate Holzbaur (Engineering), Iain Hunter (Exercise), Irene McClay (Health), Jill McNitt-Gray (Exercise), Maury Nussbaum (Ergonomics), Mark Redfern (Ergonomics), Mary Rodgers (Health), Neil Sharkey (Health), and Karen Troy (Engineering).

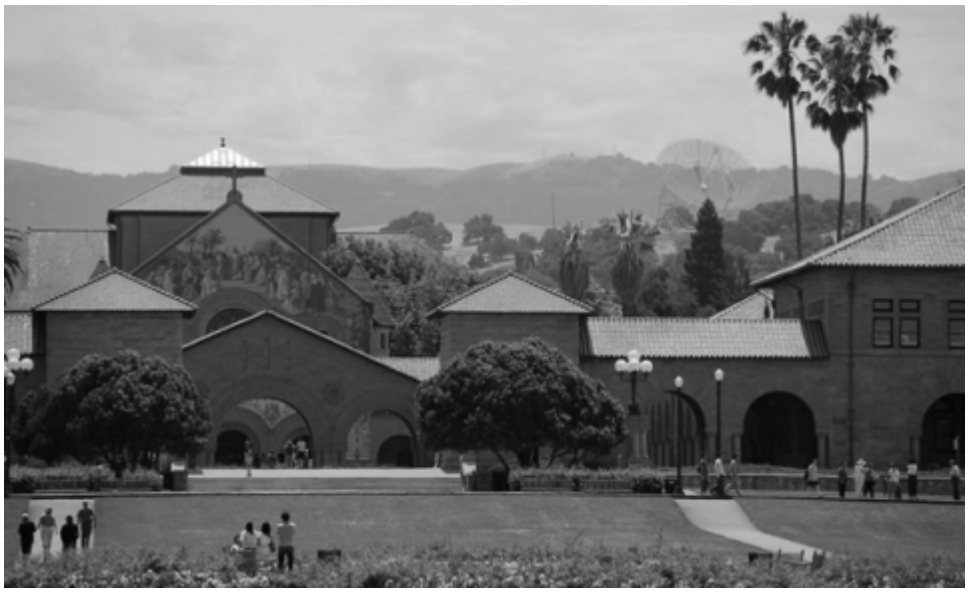
Final assignments to the various committees will enable representation from each discipline while avoiding personal and institutional conflicts. On behalf of the society, I greatly appreciate everyone's willingness to donate their time. Every person that was contacted agreed to serve on at least one committee.

Finally, a last note on the electronic submission process. With the exception of a few packages with zipped files, the e-mail submission process has proceeded smoothly and facilitated rapid dispersal of the submissions to committee members. If you have any thoughts or suggestions to further enhance the award process, please send me an email at tgross@u.washington.edu.

ASB 2007 Program Chair and Conference Co-Chairs

Francisco Valero-Cuevas, Scott Delp, and Chris Jacobs

We look forward to hosting ASB on the Stanford University Campus August 22-25, 2007.



The program will begin on Wednesday afternoon, August 22, with tours of several biomechanics labs on campus. Wednesday will also include tutorials by Richard Lieber on the use of molecular biology in biomechanics and by Scott Delp on musculoskeletal modeling and dynamic simulation.

An informal outdoor reception Wednesday evening will let you connect with old friends and meet new ones.

The formal scientific program will begin Thursday morning. The program will include keynote presentations from two spectacular scientists. Prof. Paul Selvin will discuss the nature of molecular motors. Prof. Franz Goller will describe the neural and biomechanical foundations of bird song. We also will have the distinguished Borelli lecture and the James Hay Award lecture.

Most of the conference will be dedicated to open scientific sessions. Over 450 abstracts were submitted for presentation at the conference. This is, by far, the largest number of abstracts ever submitted to an ASB meeting. The program committee is working intensively to review these abstracts and to formulate the program. The program will cover a broad range of topics, including sports biomechanics, gait dynamics, biomechanical simulation, muscle biology, motor control, rehabilitation engineering, orthopaedic science, ergonomics, and other themes. We will post the final conference schedule on the conference website as soon as possible.

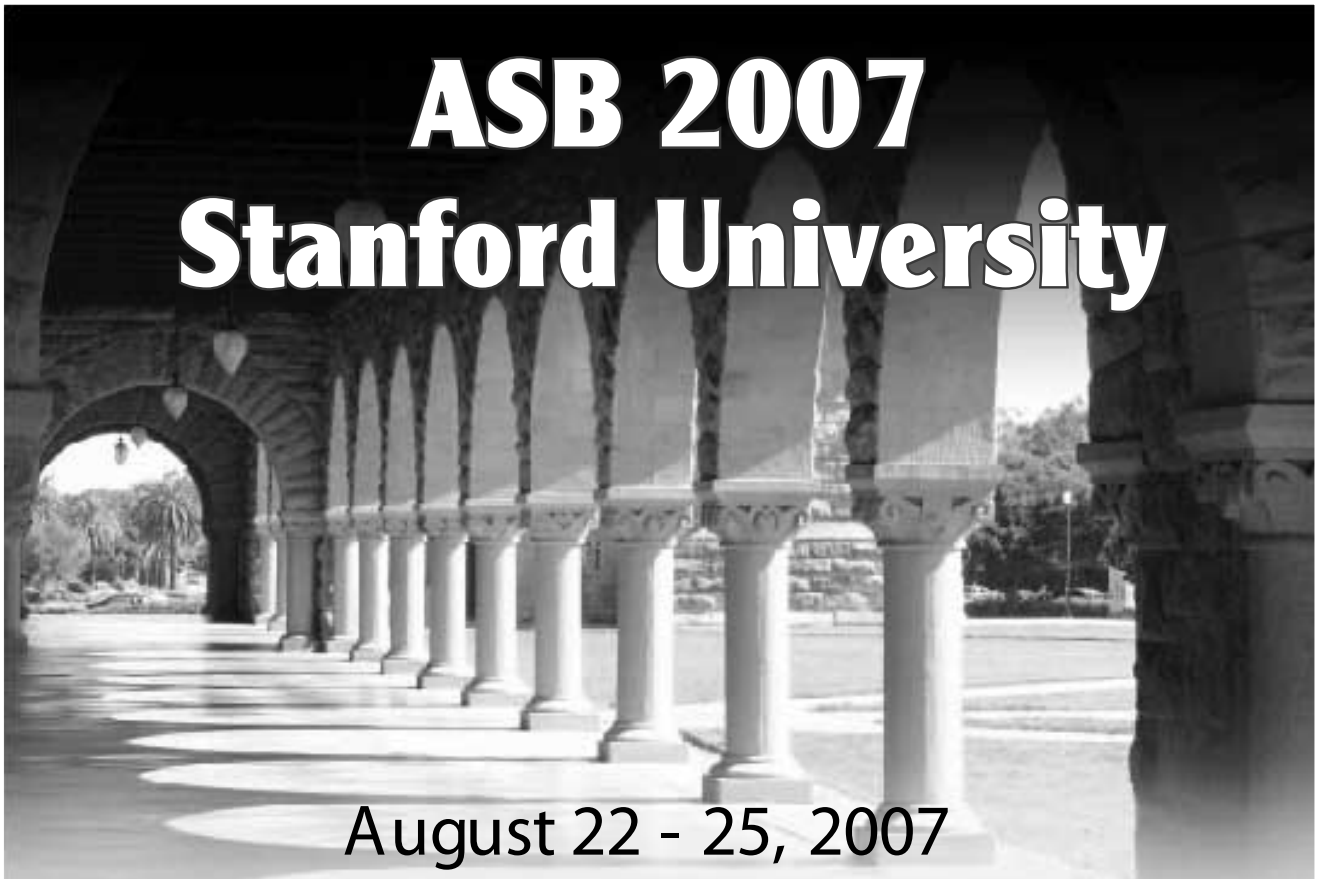
This conference marks the 30th anniversary of ASB's formation. Professor Tom Andriacchi, one of ASB's founding members, has invited other founding members to attend the conference this summer. Students will have a chance to meet the founding members and learn more about the history (and future!) of biomechanics.

Registration is now open at the conference website. In addition to registering for the meeting, you can also reserve on-campus housing. We have arranged for attendees to stay in campus dormitories to make the meeting as affordable as possible. There are also excellent hotels located close to campus. San Francisco or San Jose airports are each about 30 minutes from campus, and there are a variety of ways to travel from the airport to campus (please see the conference website for details).

August will bring warm sunny days and cool evenings to the San Francisco bay area. In addition to a fantastic conference, you will find exciting outdoor activities in the nearby Yosemite and Point Reyes National Parks.

For current information and additional details, please see the conference website (http://www.stanford.edu/group/asb2007/). If you have any suggestions or questions, please feel free to contact us. We look forward to seeing you later this summer.

ASB 2007
Stanford University



August 22 - 25, 2007

ASB is excited to announce that its 2007 conference will be taking place at Stanford University. Join us at Stanford and experience:

- A fantastic scientific program, convenient campus housing and excellent conference facilities
- Mild weather and close proximity to magnificent cultural and natural attractions
- A central San Francisco Bay Area location within 30-minutes of two international airports

For future updates on ASB 2007, please visit: http://asbweb.org

Scott Delp, Ph.D., ASB 2007 Conference Co-Chair
Christopher Jacobs, Ph.D., ASB 2007 Conference Co-Chair
Francisco Valero-Cuevas, Ph.D., ASB 2007 Program Chair

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Bioengineering Department, Stanford University

Southeast Regional Conference

The 2007 South East Biomechanics Conference (SEBC), south east regional ASB meeting, was held at Duke University on April 19-21. The meeting was enjoyed by 74 attendees representing both industry and academia. The meeting attendees were primarily from the Southeastern part of the US, however we did have participants from Wisconsin, Pennsylvania, Texas, and even Korea. Given the sponsorship from our vendors and the ASB, we were able to cover all of our costs while allowing everyone to attend the conference free of charge; this included breakfast, snacks, an opening reception and a banquet on Friday night.

There were seven sessions during the three day conference with a total of 26 student presentations. The conference opened on Thursday with a lecture by Dr. Farshid Guilak and closed out that day with an opening reception. Friday was a full day with four sessions and a keynote lecture. At noon, a moment of silence was observed for our fallen brothers and sisters at Virginia Tech and Dr. Irene Davis gave a tribute to Dr. Kevin Granata. Friday ended with a BBQ banquet full of student/faculty discussion. The final day of the conference included two sessions, presentation of student awards and lab tours. There were four presenters which received student awards this year: Nelson Cortes from Old Dominion University, Dominic Nathan from Marquette University, Jasper Yen from Georgia Institute of Technology, and David Bell from the University of North Carolina at Chapel Hill.

We would like to recognize and thank those who helped make this conference a success. First, a very big thank you to Drs. Farshid Guilak and Irene Davis for taking time out of their busy schedules to give our opening and keynote lectures. We would also like to thank the faculty members who helped us out during the conference by moderating sessions and scoring student presentations. We must also give kudos to Drs. Steven Vogel, Paul DeVita, and Daniel Schmitt for their noteworthy and insightful faculty presentations that fostered many conversations during the Friday night banquet. Last, but definitely not least, we want to recognize the research assistants from the K-Lab who spent so much time doing the little things that made the conference more enjoyable. Finally, thanks to all those who attended for taking the time to travel to the city of medicine. We hope that everyone had a great time, and we look forward to seeing you at next year's SEBC regional meeting.

Ershela Sims and Robin Queen
2007 SEBC Conference Organizers

Northeast Regional Conference

The first Northeast American Society of Biomechanics (NASB) was held March 30-31, 2007 at the University of Maryland, College Park, MD. We had an overwhelming 77 oral presentations and 150 participants from 43 different institutions representing 14 U.S. States as well as Taiwan, Ireland, Russia, and Brazil.

We had 14 different sessions which well represented the theme of the Conference, "Bridging the Gap between Biomechanics and Motor Control". The session topics included hand/finger, sport, balance/posture, motor learning, muscle, rehabilitation, bone/tissue, lower extremity, upper extremity, methods, and reliability. The topics of the presentations covered cellular to whole body biomechanics and control.

Dr. Mary Rodgers delivered the opening address. We were also privileged to have our invited speakers: Drs. Vladimir Zatsiorsky (Penn State), Steven Stanhope (NIH), and Mark Latash (Penn State). Dr. Zatsiorsky's presentation, "Multi-finger prehension: biomechanics and control" included both biomechanics and motor control aspects of human prehension. Dr. Stanhope's presentation, "A passive dynamic ankle-foot orthosis approach to enhanced gait function" showed new, sophisticated techniques for constructing an ankle-

foot orthosis. Dr. Latash delivered a tutorial on Uncontrolled Manifold Hypothesis as a tool to analyze redundant multi-effector systems.

The Awards Committee, composed of Drs. Timothy Judkins, Jane Clark, Mary Rodgers, Adam Hsieh, Marcio Oliveira, and Jill Whitall, selected two graduate student presentations for awards. The ASB Award for Best Presentation went to Arick Auyang, Georgia Tech, who's advisor is Dr. Young-Hui Chang. The Motion Monitor Award for Excellence in Research Design went to Paulo B. de Freitas, of the University of Delaware, who's advisor is Dr. Slobodan Jaric.

We thank the ASB as well as the Kinesiology, Bioengineering, Physical Therapy and Rehabilitation Science departments at University of Maryland for their generous support. We also thank National Instruments, Bose, Motion Monitor, Bertec, and Biometrics for their generous corporate support. We are pleased that we were able to provide the registration, welcome reception, breakfast, lunch, dinner, and closing ceremony free of charge to all participants.

The Organizing Committee (Faculty: Jae Kun Shim, Timothy Judkins, and Adam Hsieh; Student: Alex Hooke) is grateful to everyone who attended the conference and made it a success.

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. Companies wishing to become Commercial Members are encouraged to contact Max Kurz, Membership Committee Chair

The ASB Executive Board is pleased to recognize our commercial members for 2006:

SUSTAINING MEMBERS

Motion Analysis Corporation

Bose Corporation

EnduraTEC

Vicon

2006 Annual Business Meeting Minutes

ASB President Ted Gross called the meeting to order at 1:30 p.m. There were roughly 60 members in attendance.

A motion to approve the minutes of the 2005 Annual Business Meeting was made by Andy Karduna, and seconded by Rob Shapiro. Motion was approved by unanimous vote.

Meeting Chair's Report was given by Stefan Duma. As of the start of the Business Meeting, 460 registrations had been received for the meeting. Among these registrations, 150 were from ASB regular members, 36 regular non-members, 147 ASB student members, and 77 student non-members. The total budget for the meeting was roughly $130,000, with income breakdown in support of the budget as $61,000 in registrations, $29,000 exhibitors, $40,000 sponsorships. Stefan conservatively predicted that the conference finances would at least break even. A large number of on-site registrations tipped things pretty favorably in financial terms. Next Stefan outlined the basic flow of how the banquet would operate. He shared that the meeting evaluation forms are already available online. Thank-you's were handed out all around to people for all their hard work in preparation for the meeting. Stefan closed by emphasizing some new program features implemented this year and their potential benefits, while encouraging everyone to provide feedback on the evaluations.

Program Committee Report was given by Irene Davis, Chair. She started by thanking her committee members for their efforts, stressing that they were instrumental in program planning and abstract review. Forty reviewers were identified, solicited and assigned abstracts. Each abstract was reviewed by at least two reviewers. Program committee members were assigned to advocate for individual abstracts. Two rejection recommendations were treated as an outright rejection. Disagreements in scoring were evaluated on an ad hoc basis. 295 abstracts were accepted, and 21 were rejected (93% acceptance rate). This year Irene and her committee aimed to increase the breadth of topics and format at the meeting by adding 3 concurrent tracks in 7 podium sessions. The net result was 103 podium slots, 4 symposia and 6 thematic poster sessions. The Program Committee also chose to highlight emerging areas of biomechanics, including imaging and tissue engineering. Student co-moderators (paired with a more senior partner) were implemented for the first time in podium sessions. Irene thanked a litany of folks for all of their hard work in making the program a success. Irene encouraged everyone to start planning to attend the 2007 meeting in Stanford.

Secretary/Treasurer Report was given by Don Anderson. Don began by reporting membership numbers over the past few years (1999-2006). Regular membership numbers have declined somewhat, from a high of 543 in 1999 to a low of 513 in 2002. Over that same period of time, student membership numbers have risen significantly, from a low of 57 in 1999 to a high of 147 in 2005. Don clarified that these numbers are subject to the time of year at which they are compiled, as members are added throughout the course of the year. There was a question from member Mark Grabiner regarding this apparent loss of regular members, and Don said that he and the Executive Board and the Membership Committee would investigate the matter further, and report back to the members.

Next Don reported the results of the annual election. The new President-Elect is Rodger Kram, Secretary/Treasurer-Elect is Paul DeVita, and Program Chair-Elect is Richard Hughes. Andy Karduna has accepted the position of Communications Chair, with Michelle Sabick replacing him as the Newsletter Editor. Max Kurz has agreed to serve as the Membership Chair. Kathy Simpson (Communications Chair) and Julianne Abendroth-Smith (Education Chair, then Membership Chair) are both cycling off the Executive Board, and on behalf of the members, Don thanked them for their years of service.

Don reported that Society finances are sound. Financial figures as of 9/05/2006 were $33,146.04 in the bank, $135,976.73 in investments, for a total value of $169,122.77. Figures for last year at the Annual Meeting in August were $34,383.78, $126,993.40, and $161,377.18. A 7.1% return

was achieved on investments this past year. Finally, Don detailed specific distribution of income and expenses over the past year.

Education Committee Report was given by Steve McCaw, Chair. Steve introduced the members of his committee for acknowledgment. He reported that the Grant-in-Aid program received 7 applicants this year. The committee reviewed the applications and awarded 4 grants totaling $9,819. The deadline for applications to the 2007 GIA program is January 15, 2007. Steve shared that ASB funded three regional student meetings in the past year (Milwaukee, Atlanta and Vancouver). Steve had already received an application for a 2007 regional meeting in Durham, NC, and he would be presenting it to the Executive Board to approve funding.

Steve pointed membership to online evaluations, and encouraged them to take the time to fill them out upon return home. Steve acknowledged Melissa Scott-Pandorf's contributions as student representative. Katie Bieryla was named the newly-elected student representative.

Past-President's Report was given by Trey Crisco. He shared that the Executive Board had reviewed the nominations process and was proposing a new approach to nominations that takes advantage of electronic communication. Trey outlined the present process. It begins with the Executive Board selecting a slate of candidates for election to the Nominating Committee, delivered for a vote by the membership at the Annual Business Meeting with open nominations taken from the floor in advance of the vote. The process is somewhat awkward, and hasn't always been very successful. Trey then introduced a new process that will start with internet solicitation of nominees for the Committee, with a list narrowed to four by the Executive Board at their mid-year meeting. Then, at annual online voting, two are selected by the membership.

Next, Trey highlighted the Awards Committee activities during the past year, sharing the process and procedures for decision-making, as well as specific efforts to avoid conflict-of-interest in the selection process.

President's Report was given by Ted Gross. He started his report by acknowledging and thanking outgoing members of the Executive Board, while identifying new members joining the Executive Board. Ted shared that Walter Herzog, this year's Borelli Award winner, had donated his Award cash back to the Hay Award endowment. Ted shared a few comments as outgoing President, and highlighted the Society's emphasis on student members and involvement.

Ted formally passed the ASB Presidency to Ken Kaufman. Ken congratulated Ted on his successful term as President, and thanked him for his service to the Society (passing along a plaque along the way). Next, Ken presented a draft strategic plan that he and the Executive Board have been working on (copies were made available to members). The purpose of the document is to communicate objectives and planned directions of ASB. The plan is a series of multiyear goals and associated strategies that the Society is currently pursuing or will initiate in order to reach our shared objectives. It is meant to serve as a link between the present and the future.

Ken shared that we are now at the point where input from the ASB members is important in order to form a consensus vision of the Society's future. The draft Strategic Plan is now posted on the ASB website:

http://asbweb.org/html/strategic/strategic.html

A contact person has been established for each goal. Members were encouraged to review the document and provide feedback. The Executive Board will compile all comments and finalize the document in the first half of 2007. Then a final version will be posted before the 2007 Annual Meeting, to be ratified at the Annual Meeting. This document will then serve to guide us into the future.

Jill McNitt-Gray moved to close the meeting. Francisco Valero-Cuevas seconded at 2:12 p.m.

Respectfully submitted,

Don Anderson
ASB Secretary / Treasurer

A View From the Blue

Michelle Sabick

As I have been thinking about what to put in my column this month, I have been reflecting on both current and upcoming events in the world and in my own life. It seems that two recurring themes seem to keep cropping up: legacy and balance.

The events at Virginia Tech in April, including the tragic loss of one of our valued colleagues Kevin Granata (as you have read elsewhere in the newsletter) made me, like everyone else, stop and think about a lot of things. I did not know Kevin personally. However, in reading the outpouring of support for Kevin Granata's family and the heartfelt condolence letters sent to BIOMCH-L by colleagues and students, I was struck by two things. The first was Kevin's obvious talent in research and teaching and the wide-ranging effect he had on so many people. The comments led me to consider the concept of legacy.

For many of us, a legacy is not something we think about until we near the end of our career. We are generally too wrapped up in the day-to-day trivialities of life, like grading assignments or writing grant proposals, to seriously consider how our actions and our body of work will be perceived after we are gone. However, many of the day-to-day interactions we have are at least as important to our legacy as the number of publications we achieve or the amount of grant funding we obtain. Many people commented on Kevin's obvious talents in research, but more striking to me was the number of different people who commented on how gracious, generous, and encouraging Kevin was. To me, this is truly impressive.

Even more impressive was how the comments came from people far-flung in geography, age, and background. Many had not even known Kevin personally, but had interacted with him briefly at a conference, in a scientific review committee, or some other peripheral way. I wonder if Kevin had any notion of how his interactions had affected most of these people? Kevin Granata's tragically shortened life should remind us all that every time we interact with someone, from brief e-mails with distant colleagues to deep conversations with long-time friends and co-workers, we have a chance to have a positive effect. If we are truly lucky, we will somehow manage to influence some of these people in a constructive way, and, in so doing, create a legacy in which we can truly be proud.

The second major theme that struck me in the response to Kevin Granata's death was the theme of balance between career and family. Numerous people commented on how dedicated Kevin was to his life outside of work, even though it is obvious that he was also a very dedicated biomechanist. Sara Wilson wrote in her posting on BIOMCH-L that "*Kevin worked long and hard. .... However, he was also careful to reserve time for his family.*"

For me, it is often difficult to disengage from the seemingly unending list of tasks to be done at work and to re-engage at home. However, being a good wife, mom, and citizen may be more important roles in the "big scheme of things" than being a good scientist. This theme of balance is hitting particularly close to home with me right now as I am about to become a mom for the first time. In fact, by the time you read this, I will be. Already I am struggling with how best to balance my new role in life with my responsibilities in directing a research center. It is too early to comment on the extent to which I will be successful in maintaining balance in my own life, but suffice it to say that I will strive to emulate the successful balance that Kevin Granata obviously achieved.

To summarize my thoughts, I leave you with a quote attributed to Ralph Waldo Emerson on the true meaning of success. I hope you find it as powerful as I do.

To laugh often and much;
To win the respect of intelligent people and the affection of children;
To earn the appreciation of honest critics and endure the betrayal of false friends;
To appreciate beauty, to find the best in others;
To leave the world a bit better, whether by a healthy child, a garden patch or a redeemed social condition;
To know even one life has breathed easier because you have lived.
This is to have succeeded.

In Memoriam

Kevin Granata, PhD

December 29, 1961 - April 16, 2007

Kevin Granata, PhD died tragically at the age of 45 on April 16, 2007 on the campus of Virginia Tech where he had worked since 2003. He had started the Musculoskeletal Biomechanics lab at Virginia Tech and held the rank of Professor of Engineering Science & Mechanics.

Dr. Granata received his B.S. degree in Engineering Physics/Electrical Engineering from The Ohio State University in 1984, and then obtained a Master's Degree in Physics at Purdue University in 1986. One of his first publications dealt with measurements of low level noise coming from ships. He earned a PhD in biomechanics in the Biodynamics Laboratory at Ohio State in 1993 where he used both analytical models and experiments with human subjects to determine the magnitude of muscle forces around the lumbar spine in the work place. His early contributions in this area dealt with integrating EMG data into analytical models, reflex responses to loads and the relationship to trunk stability.

In 1997, he was recruited by the Department of Orthopaedic Surgery of the University of Virginia to be the Research Director of the Motion Analysis and Motor Performance Laboratory. He held a joint appointment in Biomedical Engineering. There he focused on expanding understanding of how brain injury interferes with balance and movement in children with cerebral palsy. He developed innovative theories of the relationships between ankle and knee joint velocities during spastic gait, using his training in dynamics and control theory. He subsequently undertook ambitious gait studies of children with cerebral palsy to identify interactions between gait patterns and recruitment of multijoint limb muscles. These theories are now making their way into clinical practice, which was one of Kevin's goals.

After moving to Virginia Tech in 2003, Kevin resumed work on the dynamics of trunk stability and the influence of walking speed on trunk stability.

Dr. Granata was one of the most gifted engineers in the field of biomechanics. He was driven to help solve major medical problems. He had deep skills in physics, mathematics and engineering that allowed him to make unique and insightful discoveries. His scientific achievements are documented in 66 peer-reviewed articles published in a broad range of scientific journals.

His extraordinary productivity in his tragically shortened career was directed primarily at two areas of control theory applied to neuromuscular control: movement impairments in people with cerebral palsy and dynamic aspects of trunk stability. He introduced new and challenging concepts questioning accepted paradigms. He pioneered the idea of reflex dynamics in trunk stability, representing the trunk as a multi-joint system stabilized by muscles having activation dependent stiffness and reflex delays with variable gain. This was tested in critical experiments involving human subjects. He was extraordinarily talented in attracting the best students, and tenacious in obtaining funding for his work and pursuing it to rigorous peer reviewed publications. Visiting his lab was exhilarating.

Kevin was a biomechanics pioneer. He was extremely logical and had a keen intellect. He was a big picture thinker and possessed a "moral intellect" - he always tried to do the right thing. He questioned assumptions and had to convince himself of the validity of the assumption before he could move on to the next step. Through this rigorous logic, he was able to build a sound biomechanical basis for his research.

Mark F. Abel, MD
William S. Marras, PhD.

Tony Keller (1955 - 2006)

The ASB has lost a valued teacher and researcher in Tony Keller, who died tragically on 6th December 2006 in Florida. Tony had a passionate interest in 'figuring out how things work', notably in the areas of bone mechanical properties and spinal biomechanics. His most cited research papers concern failure mechanisms in cancellous bone, and the time-dependent behavior of the intervertebral disc. Recently, he focused his energies on the biomechanics of spinal manipulation and mechanical aspects of low back pain to support chiropractic adjustment of the human spine. With more than 100 publications (including 16 book chapters), his work provided new insights into relationships between Spinal Manipulation Therapy and associated biomechanical and neurophysiological responses. He worked in collaboration with clinicians and scientists from Australia, Sweden, Arizona, Wyoming, Nevada and Egypt. He used simulation and modeling, animal studies, clinical studies and studies on professional athletes. Recently, he received the Scott Haldeman Award for best paper at the World Federation of Chiropractic and a CIES/Fulbright Collaborative Research Scholarship on "Modeling and simulation of lumbar spine dynamics". He was also an inspiring teacher and prolific inventor. His students designed and built human-powered lunar rovers for an annual NASA competition and fabricating a payload section for a life-size rocket launch.

Tony Keller was born to American parents in Salzburg, Austria in 1955, and grew up in Oregon where he attended Oregon State University with a cross-country running scholarship. His PhD at Vanderbilt University (1988) led to a long and productive career in Biomechanics. He spent fourteen years at the University of Vermont, where he initiated the Vermont Space Grant Consortium that provided opportunities for numerous students to participate in biomechanical research with altered gravity. He developed research projects for Master's, and Doctoral students and Postdoctoral researchers. Recently he Chaired the Department of Mechanical Engineering, prior to leaving to direct research at the Florida Orthopaedic Institute. His energy and enthusiasm are remembered fondly by colleagues in Sweden, Belgium, Egypt and Arizona, where he traveled on sabbatical leaves. He is survived in Vermont by his three children and their mother Sally, and by family members in Oregon, and by numerous students and colleagues who continue his passion for biomechanics. We feel his absence and miss him greatly.

Ian Stokes
Michael Liebschner

Calendar of Events

William Ledoux

International Society of Biomechanics
July 1 - 5, 2007, Taipei, Taiwan
Abstract deadline - past
www.isb2007.org

International Conference of Experimental Mechanics
July 1 - 6, 2007, Alexandroupolis, Greece
Abstract deadline - past
www.icem13.gr

International Society for Posture and Gait Research
July 14 - 18, 2007, Burlington, Vermont
Abstract deadline - past
www.ispgr.org

International Society for Prosthetics and Orthotics
July 29 - August 3, 2007, Vancouver, BC, Canada
Abstract deadline - past
www.ispo.ca/congress

IASTED International Conference on Biomechanics
August 20 - 22, 2007, Honolulu, Hawaii
Abstract deadline - past
www.iasted.org/conferences/home-580.html

American Society of Biomechanics
August 22 - 25, 2007, Palo Alto, California
Abstract deadline - past
www.stanford.edu/group/asb2007

IEEE Engineering in Medicine and Biology Society
August 23 - 26, 2007, Lyon, France
Abstract deadline - past
www.embc07.ulster.ac.uk

Biomechanics of the Lower Limb in Health, Disease and Rehabilitation
September 3 - 5, 2007, Salford, UK
Abstract deadline - past
www.biomech2007.salford.ac.uk

ASMW International Design Engineering Technical Conferences
September 4 - 7, 2007, Las Vegas, Nevada
Abstract deadline - past
asmeconferences.org/IDETC07

European Society of Movement Analysis for Adults and Children
September 27 - 29, 2007, Athens, Greece
Abstract deadline - past
www.esmac.org

Human Factors and Ergonomics Society
October 1 - 5, 2007, Baltimore, Maryland
Abstract deadline - past
www.hfes.org/web/HFESMeetings/07annualmeeting.html

Fascia Research Conference
October 4 - 5, 2007, Boston, Massachusetts
Abstract deadline - past
fascia2007.com/index.htm

Orthopaedic Research Society Combined Meeting
October 20 - 24, 2007, Honolulu, Hawaii
Abstract deadline - past
www.ors.org

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 - August 15, 2007
www.oandp.org/meeting2008/default.asp

Orthopaedic Research Society
March 2 - 5, 2008, San Francisco, California
Abstract deadline - September 5, 2007
www.ors.org

Gait and Clinical Movement Analysis Society
April 2 - 5, 2008, Richmond, Virginia
Abstract deadline - November 11, 2007
www.gcmas.org

American College of Sports Medicine
May 28 - May 31, 2008, Indianapolis, Indiana
Abstract deadline - TBA
www.acsm.org

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