



International Society of Biomechanics Newsletter

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AFFILIATE SOCIETIES OF ISB:

American Society of Biomechanics; Australian and New Zealand Society of Biomechanics; Brazilian Society of Biomechanics, British Association of Sport and Exercise Sciences; Bulgarian Society of Biomechanics; Canadian Society of Biomechanics/Société canadienne de biomécanique; Chinese Society of Sports Biomechanics; Comisia de Biomecanica Inginerie si Informatica (Romania); Czech Society of Biomechanics; German Society of Biomechanics; International Society of Biomechanics in Sports, Japanese Society of Biomechanics; Korean Society of Sport Biomechanics; Polish Society of Biomechanics; Portuguese Society of Biomechanics; Russian Society of Biomechanics; Société de biomécanique (France), Taiwanese Society of Biomechanics.

ISB President's Message

To begin my report, I would firstly like to thank the ISB members who have entrusted me with the honour of leading the Society as President. Although only new to the role, I have been privileged to serve on the Council in various capacities since 1999, and therefore have had the chance to work with a variety of Presidents, including Kit Vaughan, Sandra Olney, Mary Rodgers, Brian Davis and Walter Herzog. Despite their diverse approaches to leadership and the areas of biomechanics they pursued, each of these Presidents demonstrated a strong vision and passion to ensure that ISB flourished as a robust international society, which served the needs of its members around the world. This is something that I will strive to continue over the next two years.

I could not write my first report without making special mention of Brian Davis who, after 14 years of service to ISB, steps down this year as Past-President of ISB. Brian would have to be one of the most dedicated Presidents that I had the pleasure of working with. When elected to the role of President, each of us has a unique opportunity to give something back to a discipline that has provided us with so many life experiences. I speculate that Brian achieved more in his two-year reign than most of us would dare to dream. He passionately pursued his vision of ensuring ISB was truly an international society, with activities that could be enjoyed by biomechanists from all corners of the globe. His initiatives to set up a functional gait lab in Africa was a highly ambitious project, only to be matched by the equally ambitious lab projects in South America driven by our outgoing Student Representative, Eduiska Laurens, who was mentored by Brian. Both Brian and Eduiska's amazing achievements, which are documented in previous Newsletters, have raised the level of what is possible to be achieved by members of ISB. When stepping down from his role, Brian sent me a 23 page letter that meticulously documented many of the idiosyncrasies of a Society that can only be learned through years of experience. To quote from this letter, Brian wrote:

I think you know that I am passionate about the ISB. It is an organization that gives a chance to the "underdog". There was a time when I sat in

a prefabricated building on the University of Cape Town's campus, and looked at a letter I had received from Dr. Gerrit Jan van Ingen Schenau. It conveyed the message that my abstract for the 1987 ISB Congress in Amsterdam had been accepted! I remember the moment clearly, and marveled that there was a society that took an interest in people from all over the world (Brian Davis, 2009).



Past President Brian Davis encouraging grad student Ms Andrea Hemmerich at the Cape Town ISB Conference (Photo by Leendert Blankevoort).

To ensure that the efforts of Brian, Eduiska and those who helped them pursue their visions have not been in vain, my aim over the next two years is to ensure that initiatives that have been established during the past few years, as well as the ISB itself, are sustainable. To achieve this aim we are currently conducting a thorough review of all ISB Operating Codes and the Constitution to ensure that the documentation provides clear guidelines as to how the Society operates so that the transition from Council to Council is smooth and efficient. Plans are also being formulated to ensure that recent initiatives, such as the labs set up in Africa and South America, are integrated with other ISB schemes, such as the student travel programs, to ensure the initiatives are sustainable. I am also pleased to announce that the award scheme established by Walter Herzog during his past two years as President, for sponsoring several keynote lecturers and young scientist awards for affiliated societies, will continue over the next two years, with Walter keenly administering the program to foster continuity. Further details of these and other sustainability plans will be re-

leased via the Newsletter and ISB website over the coming months.

Special thanks are also extended to Karen Søgaaard, our outgoing Publications Officer, who has consistently produced high quality Newsletters as a mechanism for communication for ISB members. In preparing this report, I decided to shuffle through some old ISB Newsletters that had collected on my bookshelves over the years. The deep pink cover of Spring Issue 1985 No 18, caught my eye; this edition represented the Society's "new look" Newsletter... *"not perfect yet, but we need a few issues to warm up"*, wrote the editorial team of Jan Cabri and Jan Pieter Clarys. The Newsletter was only brief but set a format that we are still using 24 years later. Some things have definitely changed; the back-cover Kistler advertisement proudly announced that the latest desktop computer to accompany their force platform systems came with an expandable main memory up to 768 kbytes! In 1985, the World Wide Web was not yet at our fingertips, with Australia's first network not linked to the Internet until 1989. In Karen's own words *"... it may now be time for a change for the ISB Newsletter...it really needs new ideas and new energy!"*, particularly given recent development of the ISB web-page under outgoing Informatics Officer, Joe Hamill's careful guidance. We therefore welcome Darren Stefanyshyn to this challenging role as Publications Officer and look forward to seeing new initiatives incorporated into this mode of communication over the next couple of years. I am sure Darren would also greatly appreciate any input from ISB members in terms of ideas they would like to see incorporated in the ISB Newsletter.

Elsewhere in this Newsletter, the new ISB Council members and the portfolios they will undertake for the next two years are listed. I would like to take this opportunity to welcome each Council member to their role and I look forward to working closely with you to ensure ISB is sustainable and relevant to the membership for our next term and well into the future. We will be profiling various Council members, on both the ISB web-page and in future Newsletters, to ensure ISB members have an opportunity to get to know who is representing their interests in the Society.

I could not conclude this message without also sincerely thanking Kit and his team for hosting such a successful ISB 2009 Congress. Ten years earlier Kit, in his first Presidential message which appeared in Newsletter No. 75, described his vision for ISB, which was to focus on good science. Kit summarised that being a good scientist necessitated the need to be versatile, to ask the right questions, combined with a little serendipity and, most importantly, it should be fun! We certainly had fun, together with some great science, in Cape Town Kit!

On a final note, I strongly encourage all ISB members to take the time and flick through some of the old ISB Newsletters, which are available through the ISB Archives, thanks to our diligent Archives Officer John Challis (and on my bookshelves). It certainly put a smile on my face to see how far the discipline of Biomechanics has come and to appreciate the efforts of those who have contributed so much to the Society before our time. I hope I can contribute in my own small way over the next two years.

Warmest regards

Julie

New ISB Executive and Portfolios

President:	Julie Steele
Past-President:	Walter Herzog
President-Elect	Ton van den Bogert
Treasurer:	Graeme Wood (appointed)
Secretary-General:	Toni Arndt
Awards:	Andrew Cresswell
Technical Groups:	Genevieve Dumas
Education:	Robert van Deursen
Tutorials:	Krystyna Gielo-Perczak
Publications:	Darren Stefanyshyn
Affiliated Soc. & EDC:	Marco Vaz
Informatics:	David Lloyd
Archives:	John Challis
Student Awards:	Peter Milburn (appointed)
Asian Liaison:	T-Y Shiang (appointed)
ISB 2011 (Brussels):	Veronique Feipel
Student Representative:	Allison Gruber

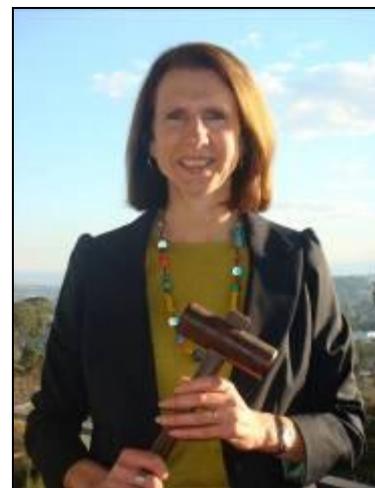


Back Row: John Challis, Genevieve Dumas, Julie Steele, Ton van den Bogert. **Middle Row:** Marco Vaz, Graeme Wood, Allison Gruber, Krystyna Gielo-Perczak, Peter Milburn, Robert van Deursen, Walter Herzog. **Front Row:** Toni Arndt, Veronique Feipel, Darren Stefanyshyn, Andrew Cresswell. Missing: David Lloyd, T-Y Shiang (*Photo by Leendert Blankevoort*).

A Tale of the Travelling ISB Gavel!

One of the long standing traditions of ISB has been for the out-going President to hand the ISB gavel to the incoming President at the General Assembly meeting as a symbol of the “changing of the guard”. At the General Assembly meeting in Cape Town this became a little tricky, as the gavel had decided to take a world wide travel expedition. Being the considerate gentleman that he is, Walter Herzog had arranged for the gavel to be sent directly from his home-base at the University of Calgary in Canada to the University of Wollongong in Australia, to save me carrying additional luggage. However, the gavel was determined to make it to South Africa and, unexpectedly arrived in Walter’s hotel in Cape Town. As it was still in its postal box, Walter again arranged for the gavel to be sent directly to Australia. Although, on this occasion, the gavel made it to its intended country of destination, it met an unexpected obstacle – Australian Customs! The gavel’s crime was its construction – wood, a restricted import into Australia. After a lengthy stay with the Quarantine Division, extensive interrogations by Customs of our persistent administrative assistants in both Canada (thanks Jessica) and Australia (thanks Nola), and payment of a

substantial release fee, the gavel was finally freed and transported from Sydney to Wollongong to complete its 2-month journey. A tip for future outgoing Presidents – beware the wandering gavel, and pass it safely from hand-to-hand at the General Assembly. It will then be the challenge of all incoming Presidents to navigate their homeland customs to ensure the ongoing freedom of the Society’s priceless symbol of the Presidency.



The ISB gavel safe in Wollongong, Australia (*Photo by Harrison Steele*).

Report on XXIInd Congress of the International Society of Biomechanics

It was a great pleasure for us to host the XXIInd congress of the International Society of Biomechanics in Cape Town from Sunday 5th to Thursday 9th July 2009. This was the third time it had been held in the southern hemisphere and of course the first time on the African continent. Since July is normally quite a rainy month – Cape Town has a Mediterranean climate – we left nothing to chance, providing each of the 595 delegates with a small umbrella sporting the ISB logo. This must have done the trick since we had five fabulous days and not a drop of rain!



Conference bag and logo (Photo by Leendert Blankevoort).

The congress started on the Sunday morning with the traditional four tutorials and these were well attended, with over 100 delegates in two of them. The society, and in particular the students, certainly benefited from the efforts of our tutorial leaders: Paolo Bonato, Ralph Müller, Peter Cavanagh and Scott Delp. The opening ceremony got under way in the Baxter Theatre to the rhythms of Africa, courtesy of the AmaAmbush Band playing their marimba drums. After a brief welcome by our local dignitaries and the ISB President, Walter Herzog, we were entertained by three students from the South African College of Music who sang four operatic pieces. “All I ask of you” from *The Phantom of the Opera* was a delight to hear.

The scientific programme was launched with the Wartenweiler Memorial Lecture that honours the late Professor Jürg Wartenweiler of the Swiss Federal Institute of Technology who hosted the first international seminar on biomechanics in Zürich in 1967. He was the inaugural President of

the ISB when it was launched in 1973. Our lecturer for 2009 was Patrick Prendergast of Trinity College Dublin where he is Professor of Bioengineering and Vice Provost. Paddy presented a marvellous lecture on “Mechanoregulation in the Skeletal Tissues” in which he demonstrated – using both theoretical and experimental approaches – how mechanical forces affect tissue growth and remodelling. The foyer of the Baxter Theatre provided an ideal venue for the welcome reception, enabling delegates to greet old friends, to reminisce, to sample the South African beer and wine, and to contemplate the meeting that lay ahead.



Patrick Prendergast (Photo by Leendert Blankevoort).

The four days of the meeting were held on the middle campus of the University of Cape Town, close to the Graça Machel Residence where many of the delegates stayed. Keynote lectures and lunches were at the Baxter Theatre, while the parallel sessions and posters were located in the Kramer Building, a ten-minute walk up the hill (the campus has a picturesque setting on the lower slopes of Table Mountain). The oral presentations were organized in four parallel sessions with six 15-minute presentations per session. With the close proximity of the four lecture venues and good timekeeping by the session chairs, it was possible for delegates to attend the lectures in which they were most interested. There was a wide variety of themes, including ageing, biofluids, cardiovascular, cellular, gait, instrumentation, orthopaedics, robotics and sports, among others. In all, there were 336 oral presentations scheduled over the four days although one disappointing feature was the number of “no shows” – at least a dozen – which was frustrating both for

delegates and organizers. A total of 250 posters were presented on the Wednesday and Thursday afternoons. Here too the themes were varied and included achilles tendon, biomaterials, computational biomechanics, electromyography, fatigue, pathological walking, running and spine, to name but a few. There was a real buzz on levels 1 and 2 of the Kramer Building as scientists engaged one another on the finer points of biomechanics.



Mimi Koehl (Photo by Leendert Blankevoort).

The winner of the Muybridge Medal for 2009 was Mimi Koehl of University College Berkeley whose lecture was entitled “Effects of Ambient Wind or Water Flow on Locomotion”. This was superb presentation in which Dr Koehl brought her subject to life, enthusing the audience, in particular the students, with her passion for biology and beautifully illustrating the power of mechanics to help us understand the movement of various creatures. Other well received keynote lectures were delivered by Diane Damiano of the National Institutes of Health, Madeleine Lowery of University College Dublin, Margot Damaser of the Cleveland Clinic Foundation, Charles Taylor of Stanford, and Carlo De Luca of Boston University. The Presidential Lecture by Walter Herzog, entitled “Respect Thy Elders: or Lessons Learnt from the Literature”, was a fitting finale to round off a successful scientific meeting.



Charles Taylor (Photo by Leendert Blankevoort).



Walter Herzog and Carlo De Luca (Photo by Leendert Blankevoort).

The congress banquet on the Thursday evening was held at the Cape Town International Convention Centre where over 500 guests sat down to a sumptuous dinner. The décor was African and the opening entertainment was provided by the Gugulethu Tenors, a talented group of singers from one Cape Town’s townships. After the traditional Dick & Dewey award ceremony, hosted by Fred Yeadon with great panache, the dance floor was filled with delegates swaying and jiving to the rhythms of the Young Makubas, an African fusion band from the Democratic Republic of Congo. The last buses, transporting people back to their hotels, left long after midnight.

For those members of the ISB who were unable to attend the meeting in Cape Town, it is possible to order your own copy of the conference proceedings that were published on CD-ROM. The cost is just R400 (about US\$50) which includes the courier fee. Please make contact with Deidre.Raubenheimer@uct.ac.za to order a copy. We are also currently negotiating with the *Journal of Biomechanics* to publish some of the keynote lectures.

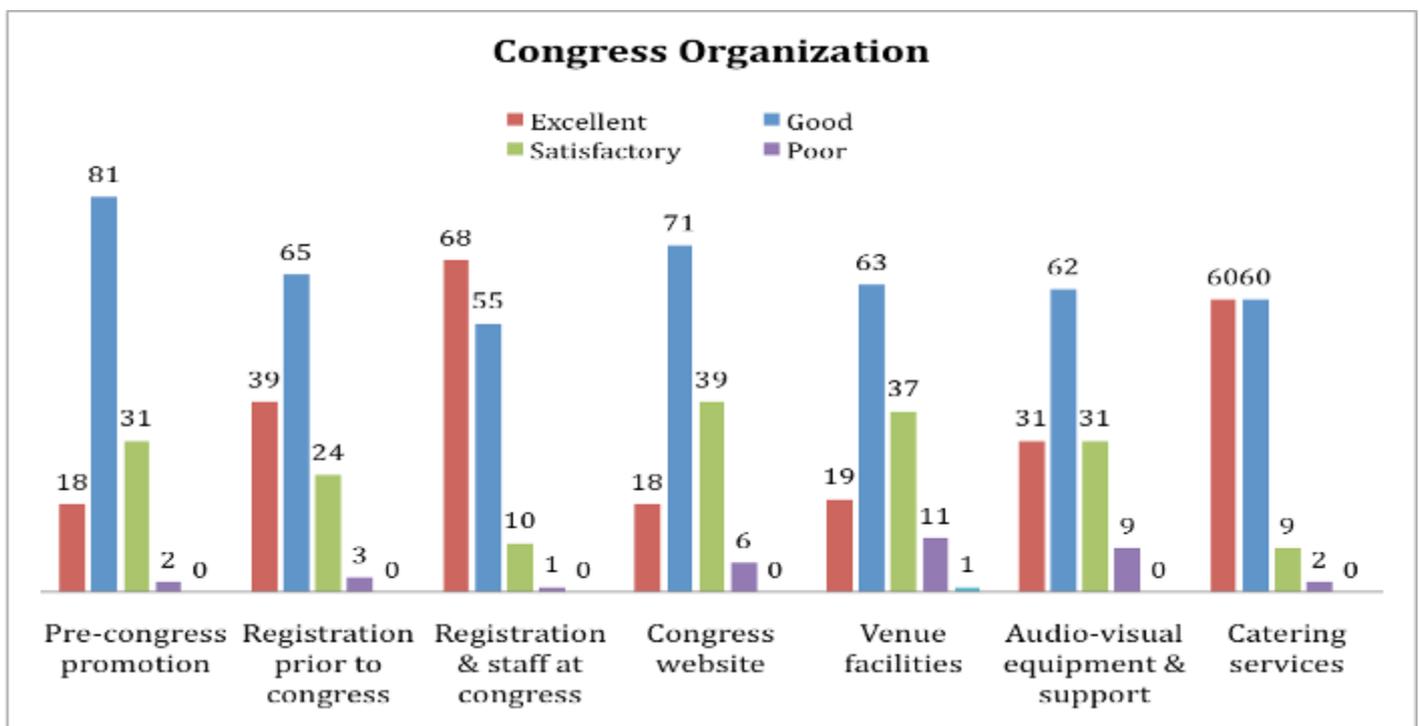
A meeting for nearly 600 participants cannot be organized without a group of dedicated people. In particular, I would like to acknowledge the contribution of my Deputy Chair and friend, Dr Heidi Schewe, from Berlin. We first met on the way to the ISB meeting held in Waterloo, Canada back in 1983. Both of us had flown in to Detroit in the USA and were catching the overnight bus from there to Waterloo. Heidi recently reminded me that I had assisted her with some Canadian money to purchase a cup of coffee, because she had not yet exchanged her currency. And so a friendship was started on the way to an ISB meeting. In October last year, Heidi contacted me to say she would like to assist with the organization

of ISB2009. Heidi lived here in Cape Town for the five months prior to the congress where she volunteered her time to organize the conference with me. Her dedication and commitment to the cause of biomechanics in general, and our conference in particular, were superb. Over 130 delegates filled out the evaluation form that was distributed during the closing ceremony and, based on the summary scores (see Figure below), it would appear that they felt this was a well organized congress.

Jim Andrews at the University of Iowa, and I have been fortunate to attend every meeting since that time, making this my 16th consecutive ISB congress. These are special events and the ISB has been an important intellectual home for me over the past three decades. By hosting this congress in 2009, I have thus had an opportunity to give something back to my society and my field of biomechanics. Like many of you, I am eagerly anticipating ISB2011 to be held in Brussels. I look forward to seeing many of you there!

I attended my first ISB meeting in Warsaw in 1979 when I was a PhD student with Jim Hay and

Kit Vaughan



2009 ISB Congress Award Winners

Promising Young Scientist Award (2009)
 Awarded to: Dr Jae Kun Shim (Maryland USA)
 Sponsor: Motion Analysis
 Amount \$5000

Young Investigator Award Podium
 Awarded to: Sandra Jasinowski (Cape Town, SA)
 Sponsor: J Biomechanics Elsevier
 Amount \$750

Clinical Biomechanics Award
 Awarded to: Karen Mickle (Wollongong, Aus)
 Sponsor: J Clin Biomechanics Elsevier
 Amount \$1250

Young Investigator Award Poster
 Awarded to: Renate List (Zurich, Switz)
 Sponsor: ISB Conference Convenor (Cape Town)
 Amount \$750

Andrew Cresswell

ISB Student Safari

Greetings ISB members! My name is Allison Gruber and I am very excited to join the 2009-2011 ISB Council as the Student Representative. I had the pleasure of attending the XXII Congress in Cape Town, South Africa and enjoyed meeting other students and attending the lectures and events. One of the best experiences I had at the Congress was participating in the student function at the Aquila Private Game Reserve. This event was open to ISB student members and was organized by the past representative, Ediuska Laurens. About 30 ISB student members and several members of the ISB Council participated in the event.



We arrived at the reserve a few hours before sunset and quickly departed for the safari in several 4x4 vehicles. As soon as we set out onto the reserve, we were greeted by a few hippos enjoying a late afternoon soak in a large pond. The hippos were very “cooperative” by smiling for our cameras and showing their teeth before they descended deeper into the pond. We then drove a little further into the reserve and saw two young elephants playing together. They took a short break from messing around to pose for the cameras. We continued on and saw a herd of springbok (antelope), zebras, and an ostrich before continuing deeper into the park.

Next, we saw a few white rhinos grazing. While we were watching them, our safari guide jumped out of the truck and walked over to an area used as a toilet for the rhinos. To our surprise, he picked up a large, dried piece of dung. He then described how you can determine what type of animal it was from, the specific species of that animal, and if it was male or female. From that one piece of dung, he was able to determine that it was from a rhino, specifically a white rhino (rather than a black rhino), and male.

We then drove towards a fenced in area of the reserve. This area was fenced off to separate the lions from the other animals. Everyone in the truck I was riding in felt like we were entering “Jurassic Park” from the large gates into the area. As we drove to the base of a small mountain, the sound of roaring lions got louder and louder. It sounded like there was a large group of lions talking to each other. No sooner than we parked the truck and turned off the engine, the roaring



Aquila Private Game Reserve was located 2 hours outside Cape Town and offers luxury accommodations, restaurant, conference center, and many activities in and around the reserve. The primary activity at Aquila is the safari through parts of its 4500 hectares set in the Karoo Mountains. Aquila prides itself on educating visitors about the animals and environmental awareness. Aquila also conducts a Social Involvement Program which directly benefits the nearby community.

stopped and there was silence. It was amazing to experience the sound of lions in the wild and their response when they knew they were being watched. The lions were on top of the mountain soaking in the late afternoon sun. Our guide told us that they climb to the top of the mountain in the late afternoon to stay warm but they are normally lying down by the road earlier in the day.



We thought we would have to settle for only barely seeing one lion at the top of the mountain until our guide drove us to a separate area of the park. In this smaller fenced area, we were able to see two leopards, two female lions, and a male lion up close. They were pacing back and forth as they were waiting for their dinner.

Once the sun had set, everyone went to the conference center building to enjoy a delicious dinner of authentic foods. Everyone had a great time as we ate and shared stories around the table. After dinner, some of the ISB Council members gave a talk on what options are available and the choices that need to be made after receiving a PhD. ISB President, Julie Steele, gave a talk on the job application process. She explained how to respond to job announcements, the “dos” and don’ts” of interviewing, and many other helpful tips and advice. Walter Herzog described his experiences as a faculty member at a university. He explained the personal and academic demands of the job, some advice on applying for grants, and the different choices one might make when selecting a

university to apply to. Krystyna Gielo-Perczak’s talk described her experiences working in private industry. She explained the steps involved in starting a research project as well as the many differences conducting research in private industry compared to a university. Once they finished their talks, the other Council members joined them in a panel to lead discussion and answer questions from the students. I found the talks and discussion very helpful and informative. I was able to make some decisions about my own future based on the Council members’ advice.



The student function was a huge success and very fun for all who attended. I want to thank Ediuska for organizing such an amazing event. The other students gave wonderful feedback on the event. I hope we will see all of these students and more at the next ISB student function at the 2010 World Congress of Biomechanics in Singapore.

Allison Gruber



ISB student representative Allison Gruber with past representatives Cheryl Metcalf (left) and Ediuska Laurens (right).

ISB 2013 Congress Call for Proposals

Persons or groups interested in organizing the XXIVth Congress of the International Society of Biomechanics in 2013 are invited to prepare and submit a formal proposal to the ISB Executive Council. Written proposals are due by April 1st, 2010. For the 2013 congress, we especially encourage proposals from ISB members in North and South America.

Shortlisted candidates will be invited to present their proposal to the ISB Executive Council at their meeting during the 2010 World Congress of Biomechanics, August 1-6, in Singapore. The

final decision will be made during this meeting through a vote by the Executive Council.

As President-Elect of the ISB, I will be coordinating the bidding process. If you are interested in applying, please contact me and I will be happy to provide detailed additional information and guidance on proposal preparation.

Ton van den Bogert
ISB President-Elect
bogerta@ccf.org

12th International Symposium on Computer Simulation in Biomechanics

The 12th International Symposium on Computer Simulation in Biomechanics was held at the Protea Hotel Breakwater Lodge, V&A Waterfront, Cape Town, South Africa between the 2nd and 4th July 2009. 75 delegates from 16 countries attended the International Symposium which consisted of 28 oral presentations (plus associated computer demos), and 2 keynote presentations (Prof Fred Yeadon and Prof Daya Reddy). The Andrzej Komor Young Investigators Award (jointly sponsored by Taylor & Francis Publishers and The Anybody Group) was awarded to Friedl De Groote from Katholieke Universiteit Leuven, for her paper entitled “Physiology based dynamic analysis of human motion by sequential convex programming”.



Friedl De Groote being presented the Andrzej Komor Young Investigators Award by Mont Hubbard.

The venue was ideally located on the V&A Waterfront to allow a fun packed social programme although a pool table or dart board could not be found anywhere! We had a great night out at

Mitchells Waterfront Brewery along with an opening buffet reception and symposium banquet at the Breakwater Lodge. At the banquet the delegates were entertained by a top South African Marimba band – “amaAmbush” and Fred Yeadon who organised the “special awards” which included Dinant Kistemaker who took for ever to arrive from Canada and lost his bags along the way, Motomu Nakashima for “maximum use of the pointer” and Federico Casolo for “relaxed session chairing”!

Special thanks go to Thomas Franz, Rick Neptune, Knoek van Soest and the rest of the programme committee for their contributions to the symposium, without whom it would not have been possible to organise this successful meeting.



amaAmbush Marimba band entertaining delegates at the banquet

Mark King
Chair, 12th ISCSB

IX Biennial Footwear Biomechanics Symposium

The Ninth Footwear Biomechanics Symposium was held as a satellite meeting of the XXIInd Congress of the International Society of Biomechanics. The symposium was held at the beautiful Lanzerac Manor and Winery in Stellenbosch, South Africa, July 10-12, 2009. The meeting attracted 129 participants who witnessed a strong scientific program with over 70 scientific presentations.



Unofficially, the symposium began with an intense soccer match that saw a well fought battle where the German team fell just short to the Word team. Unfortunately the weather didn't cooperate for the remainder of the symposium to allow Germany a chance at redemption in the much anticipated rematch. Dr. Peter Cavanagh kicked off the scientific program with his stimulating keynote lecture entitled "Therapeutic Footwear: Has Science Made a Difference for the Patient?". After an enjoyable Welcome Reception at the Manor House to end the first day, Dr. Benno Nigg began the next day's program with his excellent keynote lecture on "Barefoot Shoes – Energy Return & Future Shoe Development". After a very full program, participants were able to relax and socialize during a wine tasting event in the Winery Cellar. The final day began with an inspiring keynote lecture by Dr. Martyn Shorten entitled "Plantar Pressure Distribution and Footwear Design". The scientific program ended with a thought-provoking question and answer period where attendees challenged the panel of our keynote speakers. The symposium officially concluded with the symposium banquet which included the presentation of the awards, both formal and informal (thanks to Martyn Shorten and Toni Arndt) and a traditional African performance by Drum Café. In true compliment to the soccer match as the unofficial start of the symposium, the informal conclusion of the symposium saw many attendees retreat to the

nearby lounge after the banquet where socializing continued well into the night and saw many of the award winners participate in an impromptu dip in the frosty pool!

Awards (\$1000US)

Benno Nigg Award for Applied Research

Presented by: adidas International

Awarded to: Jens Heidenfelder

Peter Cavanagh Award for Basic Research

Presented by: Nike, Inc.

Awarded to: Jason Cheung

Martyn Shorten Award for Innovation

Presented by: Rsscan International

Awarded to: Kenta Moriyasu

Ned Frederick Young Investigator Award

Presented by: Li-Ning, Ltd.

Awarded to: Timo Schmeltzpfenning

Advanced Research Award

Presented by: ASICS, Corp.

Awarded to: Uwe Kersting

Dress Shoe Research Award

Presented by: Taryn Rose International

Awarded to: Kathryn Mills

Performance Research Award

Presented by: New Balance, Inc.

Awarded to: Lisa Stirling



A special thanks to: all of our sponsors and exhibitors; Regan Arendse for the local organization, choosing the venue and the new shirts he purchased for us so we would have something clean to wear when our luggage didn't arrive; and especially Jay Worobets and Geng Luo for all of the hard work in organizing and executing the conference.

*Darren Stefanyshyn
Symposium Chair*

Minutes of the ISB General Assembly Meeting
Cape Town, South Africa, Wednesday July 8th 2009, 12:30 pm

Present: Walter Herzog (Chair), Toni Arndt (Minute Secretary), John Challis, Brian Davis, Robert van Deursen, Veronique Feipel, Krystyna Gielo-Perczak, Ediuska Laurens, Peter Milburn, Julie Steele, Kit Vaughan, Frans van der Helm, Tzyy-Yuang Shiang, Karen Søggaard, Andrew Cresswell, Graeme Wood, Allison Gruber, Genevieve Dumas, Ton van den Bogert, Darren Stefanyshyn, Marco Vaz.

Ian Heazlewood, Gert-Peter Brüggemann, Maurice Yeadon, Dieter Rosenbaum, Wolfgang Potthast, Gordon Robertson, Michael Voigt, Federico Casolo, Hyun Gu Kang, Viviane Fransson, Rebecca Mellifont, Mark King, Tiamiyu Adijat Omowumi, Ewald Hennig, Inga Krauss, Nmomelu Solomon, Maarten Bobbert, Lildam Oliveira, Devi Bheemappa, Carlo De Luca, Karen Mickle, Peter Kastmand Larsen, Tine Alkjær, Claudia Giacomozzi, Daniel Baumgartner, Arne Lundberg, Goël Guilhem, Michael Peolsson, Wendy Gil-leard, Elizabeth Hardin, Geza Kogler, Keith Williams, Berthold Krabbe, Stefan Grau, Benno Nigg, Erik Catteysse, Serge van Sint Jan, Matthew Pain, Akin Oguz Kapti, Thomas Franz, Heidi Schewe, Dirk Jan Veeger, Bart Koopman, Andrew Phillips, Filiz Ates, Jan Yuccson, Vera Moniz-Pereira, Antonio Prieto Velosa, Nachi Chockalingam, Min Chung Lau, Kazuo Funato, Gaspar Morey Klapsing, Angela Höhne, John P. Paul, Tomohisa Miyanishi, Akira Iiboshi, Cheryl Metcalf, Martin Warner, Leendert Blankevoort.

Apologies for misspelt member names. I have done my best with the handwritten attendance list presented.
Toni Arndt

1. Welcome (*Walter Herzog*)

WH welcomed all to the meeting and outlined the agenda. WH suggested a minute of silence in memory of Alex Stacoff. The General Assembly held a minute of silence.

2. Approval of Minutes: 4 July 2007

MOTION:

Moved: Walter Herzog; Seconded: John Challis:

“That the Minutes of the ISB General Assembly held in Taipei, Taiwan on July 4 2007, as reported in the ISB Newsletter # 103 (Feb. 2008), be approved.”

Approved unanimously with no business arising.

WH highlighted that the minutes from 4 July 2007 had suggested a deficit budget which had been approved.

3. President’s Report (*Walter Herzog*)

WH mentioned that four new Honorary members had been accepted to the ISB. These members were Peter Cavanagh, John Paul, Jaqueline Perry and Doris Miller. Each new Honorary member received a plaque in recognition of this honour. A picture of one of the plaques was shown. John Paul expressed his appreciation.

WH summarised the Affiliated Societies President grants scheme. Under this scheme US \$10,000/year had been allocated for sponsoring ISB keynote lectures at Society meetings (US \$2,000/lecture) and young investigator awards at these meetings (US \$500/award). Under the Affiliated Societies scheme, ISB has also assisted funding for establishment of a laboratory in Tanzania (overseen by Li Li and Joe Hamill) and for establishment of a laboratory in Venezuela (overseen by Ediuska Laurens).

WH welcomed Northern Digital as a new bronze sponsor of ISB. He also announced that a new “Emerging Scientist” award, to be sponsored by Carlo De Luca, had been accepted.

WH also announced that a new ISB Working Group for Robotics was being established. This group was being organised by Jim Dickey, Nigel Shrive and Ton van den Bogert.

4. Treasurer’s Report (*Graeme Wood*)

GW presented income/expenditure statement 2007-08 and 2008-09:

(All values in Australian Dollars)

Income / Expenditure Statement: 1 Jul 2007 to 30 Jun 2008

(1 AUD = 0.92 USD)

Revenue	167,448	
Expenses	167,791	
Profit (Loss)	(343)	Budget (36.5k)

Income / Expenditure Statement: 1 Jul 2008 to 30 Jun 2009

(1 AUD=0.78 USD)

Revenue	154,663	
Expenses	170,597	
Profit (Loss)	(15,934)	Budget (38.5k)

Revenue	2007/08	2008/09
Dues	59,859	72,691
Interest	9,791	7,674
Advertising	7,788	4,615
Sponsorship	36,914	19,871
Tutorials	0	0

Expenses	2007/08	2008/09
Student Grants	26,086	51,697
Tutorial programme	4,220	0
EDC programme	10,393	10,860
Affiliate Society Support	2,221	20,892
Website	5,392	9,381
Bank charges	743	927
Postage/Phone/Stationery, etc.	3,240	3,650
Council/Presidents’ expenses	11,403	13,122
Awards/Plaques/Certificates	11,658	559
Treasurer’s expenses	16,500	16,500

GW concluded that ISB had run a deficit budget as approved in Taipei. GW presented the balance sheet as at 30 June 2009:

Balance Sheet (as at 30 June, 2009)

All values in Australian Dollars (1 AUD = 0.78 USD)

Cash Manage. Account (Aus)	62,689
Investment Accounts (Aus)	144,131
Investment Account (USA)	15,151
Checking Account (USA)	13,095
Total	235,067

[2007 Balance 256,353]

Auditor's Report: Dieter Rosenbaum (Germany) and Tine Alkjær (Denmark) audited the financial reports. Dieter Rosenbaum stated that they regarded the reports as clearly presented, that the finances had been well handled and everything looked good.

MOTION:

Moved: Dieter Rosenbaum; Seconded: Maurice (Fred) Yeadon:

"...that the General Assembly accept the Financial Reports prepared by the Treasurer as a true and correct statement of the Society's finances"

Approved unanimously.

GW presented the proposed budget for 2009-10 and 2010-11. The budget proposed by the Executive Committee was once again a deficit budget:

All values in Australian Dollars (1 AUD = 0.78 USD)

Key items:

Revenue	2009-10	2010-11
Dues	83,000	85,000
Sponsorship	30,000	30,000
Other income	15,000	12,000
Expenditure		
Student programme	45,000	45,000
Developing countries	13,000	13,000
Website development	11,000	11,000
Awards	15,000	15,000
Tutorials	15,000	1,000
Congress 2011	0	15,000
Affiliate Soc. Support	13,000	13,000
Recurrent costs	25,000	25,000
Council expenses	10,000	10,000
Treasurer's expenses	16,500	16,500
Profit (Loss)	(35,500)	(37,500)

MOTION:

Moved: Graeme Wood; Seconded: Gordon Robertson:

"...that the budget as presented by the treasurer, be approved"

Approved unanimously.

5. Student representatives Report (*Ediuska Laurens*)

EL regarded the following two points as the most important in her time as student representative:

- Setting up a gait analysis laboratory in Venezuela
- Organizing three workshops in South America, in which ISB sponsored the keynote speakers

EL initiated ISB collaboration with Simon Bolivar University in Caracas, Venezuela, to set up gait analysis laboratory. Company donations worth over US \$180,000 were received from Motion Analysis Corporation, AMTI and Delsys. ISB financed equipment shipping (US \$9,000) and installation and training (by Susan D'Andrea).

The ISB sponsored speakers in South America were:

- Workshop at the Universidade Federal Rio Grande do Sul, Porto Alegre, Brazil: Adamantios Arampatzis
- Workshop at Los Andes University, Merido, Venezuela: Alvaro Mata
- Workshop at the Simon Bolivar University, Caracas, Venezuela: Jose Felix Rodriguez

An ISB mentoring program has been started. This works on an ISB researcher-to-student and student-to-student-basis.

An ISB web-based Google group has been started.

EL organised the ISB student event in Cape Town: 40 students went on a safari to the Aquila Game Reserve, where they received a dinner and presentations on the topic "Lessons learnt in the pursuit of jobs".

EL thanked the three ISB presidents Brian Davis, Walter Herzog and Julie Steele for approving her suggested budgets and for their support. EL also thanked the ISB Council and the abovementioned companies for their support.

6. Affiliated Societies and Economically Developing Countries Report (*Veronique Feipel*)

Applications for Affiliated Status:

VF presented cases for applications from the German Society of Biomechanics (Deutsche Gesellschaft für Biomechanik, DGfB) and the Portuguese Society of Biomechanics (Sociedade Portuguesa de Biomecânica, SPB) seeking affiliated status. A brief history and the aims of the Societies were presented.

MOTION:

Moved: VF; Seconded: Robert von Deursen:

"...that the application of the German Society of Biomechanics be accepted and the Society is welcomed as an ISB Affiliated Society"

Approved unanimously.

MOTION:

Moved: VF; Seconded: Julie Steele:

"...that the application of the Portuguese Society of Biomechanics be accepted and the Society is welcomed as an ISB Affiliated Society"

Approved unanimously.

Seed groups: The Centre for Modelling the Prosthetic Appliances and Surgical Operations on Human Skeleton (CMPICSU) - POLITEHNICA University of Timisoara, Romania was accepted as a new seed group without any opposition. The contact person is Mirela Toth-Tascau.

Present seed groups are the biomechanics societies in: Thailand and Venezuela.

7. Past President's report (*Brian Davis*)

2009 Council Elections: approximately 200 votes were received. The 2009-2011 Council and their portfolios are:

President:	Julie Steele
Past-President:	Walter Herzog
President-Elect	Ton van den Bogert
Treasurer:	Graeme Wood (appointed)
Secretary-General:	Toni Arndt
Awards:	Andrew Cresswell
Technical Groups:	Genevieve Dumas
Education:	Robert van Deursen
Tutorials:	Krystyna Gielo-Perczak
Publications:	Darren Stefanyshyn
Affiliated Soc. & EDC:	Marco Vaz
Informatics:	David Lloyd
Archives:	John Challis
Student Awards:	Peter Milburn (appointed)
Asian Liaison:	T-Y Shiang (appointed)
ISB 2011 (Brussels):	Veronique Feipel
Student Representative:	Allison Gruber

WH thanked BD for his work.

8. Introduction of new President and Council members (*Julie Steele*)

WH handed over to JS. Due to travel problems the ISB president's gavel was not available but will be sent directly to JS. JS was welcomed as the new President. JS thanked WH for his work over the past two years.

JS introduced the new council and thanked the outgoing council members:

Brian Davis
Karen Sjøgaard
Frans van der Helm
Joe Hamill
Ediuska Laurens

Certificates of appreciation were presented. Joe Hamill was not present, but was thanked in his absence.

9. Other Business (*Julie Steele*)

There was no other business. JS said a final thank you to the Council, WH and the General Assembly.

JS closed the meeting at 1.17 pm.

Report respectfully submitted by Toni Arndt, ISB Secretary General

\$25,000 2009 Nike Research Award Winner

The effects of habitual footwear use: foot shape and function in native barefoot walkers

D'Août K, Pataky TC, De Clercq D & Aerts, P.



Dr. Kristiaan D'Août
Laboratory for Functional Morphology
Department of Biology
University of Antwerp, Belgium



Kristiaan D'Août (middle) with Ewald Hennig (L) and Mark Lake (R) at the Footwear Biomechanics Symposium

Editors Note



I have the dubious job of taking over from Karen as the newsletter editor. Thank you Karen for doing an excellent job for the past six years. Part of my mandate is to modify the newsletter from its current format to an online based version, so look forward to a new face of the newsletter launching at the beginning of 2010. In making these modifications, I am looking for any suggestions that you the members may have with respect to content or presentation of the new format. This is your newsletter so send me an email and let me know what you would like to see included!

Darren Stefanyshyn
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New members to ISB

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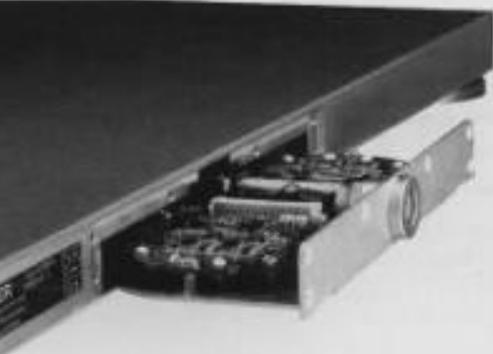
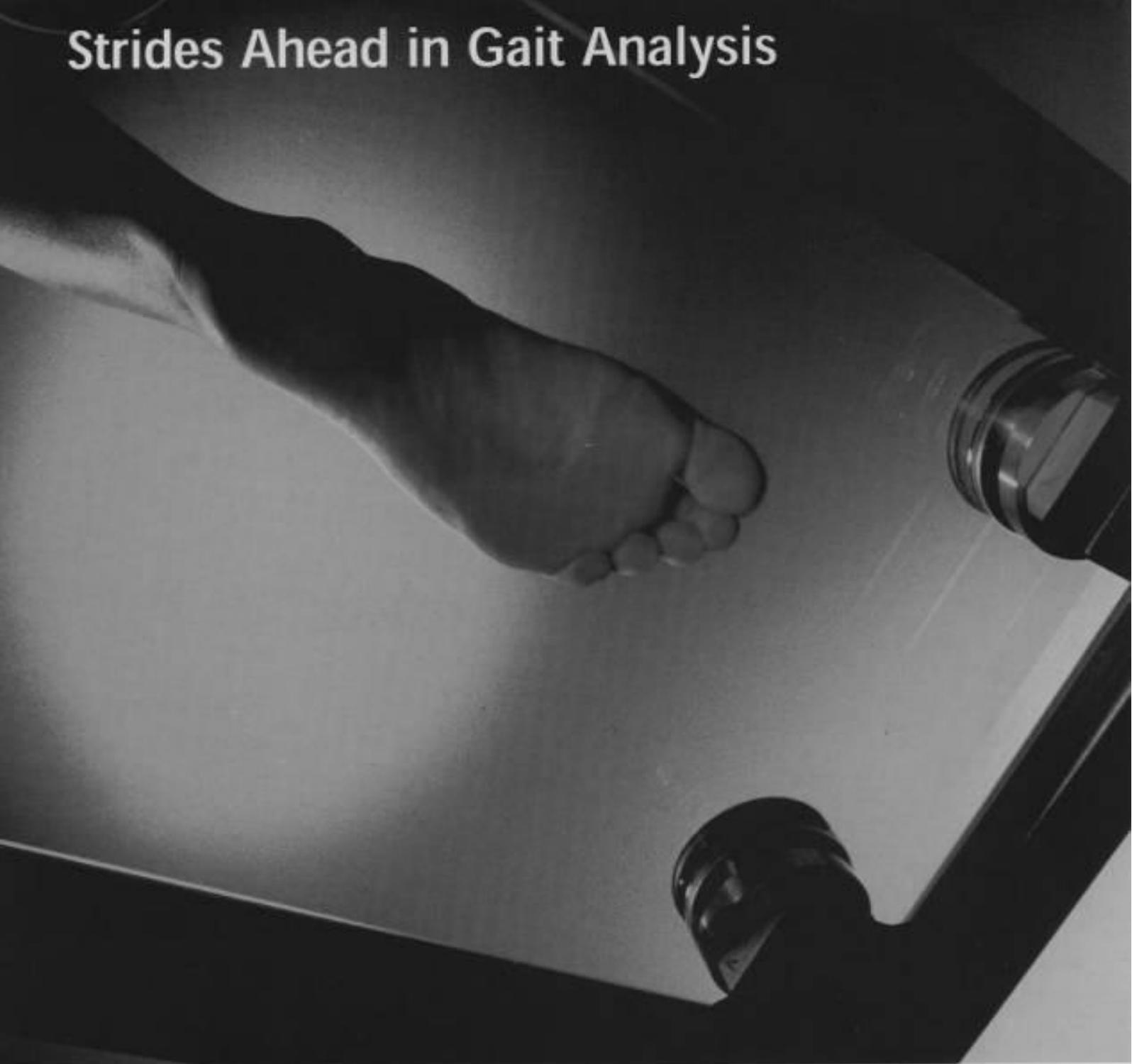
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