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Editors: Stephen Ferguson (editor in chief), Liesbet Geris, Amit Gefen. Editorial Office: Kroto Research Institute, Dept. of Materials Science and Engineering, University of Sheffield, Broad Lane, Sheffield S3 7HQ, UK. E-mail: publication.chair@esbiomech.org Website: www.esbiomech.org

### **MESSAGE FROM THE PRESIDENT: On the impact of biomechanics**

### **Damien Lacroix**

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Dear Members,

Two years ago in the ESB newsletter I wrote in a pessimistic tone about the low scientific impact of the traditional biomechanics journals. Has the situation changed in the last two years? Not really. In fact it has worsened. The impact factors of the Journal of Biomechanics and Journal of Biomechanical Engineering have decreased while the impact factors of Clinical Biomechanics and Biomechanics and Modeling in Mechanobiology have remained constant. On the other hand the best journals in biomaterials and tissue engineering have increased. Therefore, the biomechanics journals are still losing ground within the biomedical engineering field. Are they caught in a downward spiral? I think that we are in a changing period where the subject and title of a journal do not matter so much anymore for someone interested to publish in that journal. What matters is the impact factor and therefore anyone who has a nice biomechanical study will try to publish it with the highest impact factor, whatever the journal. The excessive pressure of impact factor has led to this situation, which was enhanced by the ability to search literature through any domain and not to a specific biomechanics journal, like we used to do still ten years ago. We therefore see more and more biomechanical studies published in clinical, biomaterials, regenerative medicine, or multidisciplinary science journals of high

impact. This means that, as a community, we are better at reaching out to other communities than integrating others within our own. The scientific impact of biomechanics is thus probably under-estimated through the traditional journal measures.

In fact, the success of several ERC Starting Grants to biomechanicians shows that, although there is no biomedical engineering panel within the ERC structure, the quality of the biomechanical science is still recognized among other engineering fields. The Virtual Physiological Human calls of the EC FP7 ICT programmes is another example where members of the ESB are coordinating or participating in fundamentally biomechanics-related projects. The more traditional biomechanics subjects like kinematics and orthopaedics have also remained very much within the biomechanics community and have a direct impact on society through the well-being of people. So it is safe to say that biomechanics research is very lively and is considered to be more and more an essential link in the comprehension of the biological processes and clinical disorders. I think that the recent advances in epigenetics will push to a much greater level the recognition of the influence of biomechanics in most molecular processes. discovery of the human genome in 2003 was considered rightfully as an outstanding milestone achieved by the genetics community. However, this discovery revealed also the limitations of traditional genetics due to the closeness of the human genome to other species. With only about 250 genes coding for proteins, the epigenome is most likely involved in many diseases. During the life of a person, the changes of the external environment acting on the host will express genes in a given manner that will affect morphogenesis of species. Diet and smoking are the typical examples to show the effect of epigenetics in various diseases. Mechanical loading, as daily exercise, is another important external environment acting on cells. We can therefore hope that the central position of biomechanics in regulating cellular events and the openness of biomechanicians to other communities can open a new bright future for the research in biomechanics.

### 18<sup>TH</sup> CONGRESS OF THE EUROPEAN SOCIETY OF BIOMECHANICS

### FINAL CALL FOR ABSTRACTS: DEADLINE - 1st December 2011

www.esbiomech2012.org



The 18th Congress of the European Society of Biomechanics will be hosted by Instituto Superior Técnico (IST), Technical University of Lisbon, Portugal. The Congress will take place at the Congress Centre of IST, located in the civil engineering building of the Alameda campus. IST is the School of Engineering of the Technical University of Lisbon (UTL) and is located a convenient distance from hotels, restaurants and diverse cultural sites. Being close to the centre of Lisbon, IST is easily reached by metro, bus, taxi or car from any location in town, including the airport (only 10 minutes away by taxi). Lisbon, the capital of Portugal, is a beautiful historical city facing the Atlantic Ocean, which has been a point of cultural interchange and encounter for many centuries for visitors coming from all over the world. It is a safe and pleasant city, where delegates and their companions will feel at ease and will be very well received.

The main objective of the ESB2012 Congress is to bring together researchers and practitioners in biomechanics and to stimulate and promote research on all core topics of biomechanics, including emerging research areas. The event will open on Sunday, the 1 of July, with a pre-course of interest to graduate students, postdocs, and young researchers. The main Congress programme will span from Monday, the 2<sup>nd</sup>, to Wednesday, the 4<sup>th</sup> of July and will feature different tracks of presentations from delegates. Plenary sessions are planned to address current challenges in biomechanics, and to provide valuable insight into the ever-increasing importance of collaborative research. Confirmed plenary speakers include Prof. Gerhard Holzapfel, Prof. Ton van den Bogert and Prof. James latridis. Based on the previous editions, it is expected that the ESB2012 Congress will have a strong impact on the development of biomechanics, identifying emerging areas of research, promoting the collaboration between participants and industry members, providing information on interdisciplinary EU funding opportunities programmes. biomechanical education programmes.

### **Key Dates:**

**Deadline for abstracts:** December 1<sup>st</sup>, 2011 **Notifications of acceptance:** February 28<sup>th</sup>, 2012 **Early registration deadline:** May 30<sup>th</sup> 2012 **Conference:** July 1<sup>st</sup> – July 4<sup>th</sup>, 2012

### Submission of Abstracts:

Authors are invited to submit their contributions on any of the congress topics. The submission of abstracts and congress registration should be performed via the website at http://www.esbiomech2012.org.

Conference proceedings will be published online by Elsevier as a supplement of the Journal of Biomechanics.

### Congress Awards:

- Huiskes Medal for Biomechanics
- S.M. Perren Research Award
- **ESB Clinical Biomechanics Award**
- Best Doctoral thesis in Biomechanics
- **ESB Student Award**
- Best Poster Award
- **ESB Travel Awards**

### Registration Fees

Early registration until the 30<sup>th</sup> of May is advised to benefit from the congress reduced fee. The registration fee covers congress bag, proceedings, lunches, coffee breaks and welcome reception. The registration fee also includes a one-year ESB membership, valid until the end of 2013 for ESB members who have paid their 2012 membership fee, or until the end of 2012 for non-members willing to apply for ESB membership. More detailed information available at the Congress webpage.

#### Social events:

The social programme will include a welcome reception, the Congress banquet and a cultural event for students

### Organising committee:

Paulo R. Fernandes, IST-TU Lisbon (Chairman) João Folgado, IST-TU Lisbon (Co-chairman) Miguel Tavares da Silva, IST-TU Lisbon (Co-chairman) Helder C. Rodrigues, IST-TU Lisbon Jorge Ambrósio, IST-TU Lisbon Eduardo B. Pires, IST-TU Lisbon Jorge Martins, IST-TU Lisbon Fernando Simões, IST-TU Lisbon

### Address:

Centre for Mechanical Design Mechanical Engineering Department Instituto Superior Técnico Av. Rovisco Pais

Peter Zioupos, ESB Council member

1049-001 Lisboa, Portugal

Phone: +351 218417280 +351 218417915 Fax: Email: esb2012@dem.ist.utl.pt Website: http://www.esbiomech2012.org

### **NEW AWARDS for the European Society of Biomechanics**

In the light of the contribution Prof. Huiskes made to the ESB, the council has decided to re-name its new medal for outstanding achievement in Biomechanics the 'Huiskes medal for Biomechanics'. The criteria for the award of this medal are as follows:

#### Huiskes Medal for Biomechanics

- Candidate must have contributed significantly to biomechanics.
- Not restricted to ESB members.
- Candidate nominations submitted by at least two ESB members.
- Award consists of a medal and all expenses are covered.
- Invitation to present a plenary keynote lecture.
- Deadline: <u>December 1</u><sup>st</sup>, 2011.

The Best Doctoral Thesis in Biomechanics is a new award with which the ESB recognizes the development of an outstanding doctoral final thesis that has contributed to the advancement of the theory and/or applications of Biomechanics:

### Best Doctoral Thesis in Biomechanics

- An outstanding PhD final dissertation.
- Selection based on the original PhD & related CV.
- ESB members when they apply for this award.
- PhD graduates have up to 3 years after the defense for submission.
- Award will consist of a certificate, 2,000 € and payment of registration and banquet fees.
- Deadline: December 1<sup>st</sup>, 2011.

### All the current ESB Awards are still available for the next Congress in 2012:

- S.M. Perren Research Award (Deadline: <u>December 1<sup>st</sup>, 2011</u>).
- Clinical Biomechanics Award
- Student Award
- Poster Award
- Travel Award (Deadline: March 15<sup>th</sup>, 2012).

Additional information can be consulted on the ESB web page (http://www.esbiomech.org/Section/esb-awards).

### **EAMBES UPDATE**

# European Alliance for Medical and Biological Engineering and Sciences (EAMBES) update by Stephen Ferguson



The EAMBES has continued its lobbying activities, with a visit this summer of an EAMBES delegation to the Directorate General for Research and Innovation of the European Commission. The meeting outcomes have been communicated by the EAMBES and are summarised here for ESB members. The need for an interdisciplinary approach was highlighted, with three lines for action suggested: bridging the gap between clinicians and engineers, facilitating and

accelerating the interaction between academics and industry to support spin-offs and participate directly in the reformulation of the Medical Devices Directive. The EAMBES members also stressed the importance of support in future research funding programs for innovation. While the current FP7 call does increase support for health technologies, this is aimed at SMEs, where the EAMBES position is that support must also be provided for university spin-offs. Further discussion points included the composition of the steering group on Active and Healthy Ageing, with the EAMBES delegates stressing the importance of including proper representation from BME academic partners and also SMEs. A final point of discussion was the EAMBES suggestion to include renewal mechanisms for successful EU projects, to ensure continuity and sustainable progress in biomedical engineering developments. The current legal structure of the Commission opposes such a mechanism, in the interest of fair competition, however the concept was still favourably received by the Director of Health and it was foreseen that legal measures could be adopted to include such a mechanism.

The EC has recently published its synthesis report on the public consultation on the Active and Healthy Ageing Innovation Platform. The EAMBES had presented a very comprehensive position paper during this consultation, and a clear alignment was evident between the EC report and the EAMBES position. Both identified major barriers to innovation, highlighting the lack of funding, the lack of support for the innovation process itself, and the lack of evidence for the benefit of innovation. The EAMBES will continue to push for a stronger recognition within the EC of biomedical engineering and health technology research as a unique and valid independent scientific and technical domain.

All documents are available from the EAMBES webpage: (http://www.eambes.org/documents).

### STUDENTS' CORNER

### Insight into a job search in the medical industry by Arzu Tasci

With the credit crunch now hitting hard, even in the most affluent areas of Europe, a position in industry after studying for a degree or completing a Ph.D. is far from guaranteed, and in certain areas looking increasingly more and more difficult to find. Student's Corner takes a look into the search for a job in the medical industry, and we've invited Arzu Tasci, one of the ESB Student committee members, to comment from her perspective. Arzu completed her Ph.D. some two years ago and is now working for Stryker in Switzerland. Here are her thoughts on the dos and don'ts when looking for that perfect position:

Two years ago, I was completing my Ph.D. After finishing projects and publications, I started an industry career. I learned a couple of things that helped me a lot throughout my job search which might also be helpful to others in a similar position:

- 1) Never avoid scientific meetings / congresses: It may not be immediately apparent how you are going to find an industry job at a scientific meeting but it really works! Research and Industry are much closer than you would expect, just consider the amount of research that goes into innovative new products. Important for your job search in industry is to get to know the company where you want to apply, e.g. by reading their web page, news and job offers. You should also inform yourself about the opportunities coming along with a certain position and tasks you could be responsible for. If you appear well prepared in a meeting or congress, by investigating thoroughly the company's background and job offer beforehand, you will look competent and can profit to a high degree. During the meeting, check out the industrial partners; get specific information by asking prepared questions and compare your background. Ask about the daily work at the company, goals and the company focus. Your CV might be a suitable "business card" when you are looking for a job. Do the networking while in the conference and when you are back home, do follow-ups, i.e. contact them by E-mail or on the phone and if necessary ask further questions etc.
- 2) Be open to new fields: be prepared to attend the non-scientific sessions in the meetings, for example sessions on patents, intellectual property or regulatory affairs could give idea on the topics that are essential for the development of medical devices. The organization in industry allows you to explore different tasks in addition to research. During your job research, check the job descriptions from other departments in addition to Research and Development such as operations, intellectual property etc.
- 3) Cooperation & Internship: If you are working with a commercial partner during your Ph.D., try to

cooperate as much as you can. In this way, you can learn the process flow and also get good inside information on the institution. It is an excellent opportunity to explore the differences between industrial and academic approaches. This would also help you to harmonize the best features of both sides during your project. If you are not working with a commercial partner, try to find a training or internship for your summer. It could be intense, but it would be a good investment for your postgraduate or postdoctoral career.

- 4) Good CV: Preparing a good CV is the key to any application. Be aware of your achievements and don't forget to include them in your resume. Add your goals, which show that you have a focus or a vision. If you already have industrial experience, this is golden add it to your CV and describe the tasks that you performed during your working experience. Make your CV look good a good font and spacing makes a lot of difference. Get feedback from a peer, or even better from your boss or someone with experience while you may not want to accept everything they have as advice, they will almost certainly have a few good tips worth taking on.
- 5) Mentor & University connections: Find yourself a mentor who has insight into your field and locations. Use the opportunities that Alumni organizations offer and don't miss the recruiting events on-campus.
- The start is the ending: A job search is a unique process for each individual and the sooner you start, the better you get a feeling about the actual market and what might work for you and what does not. You should define and distinguish your core competences and additional competences; whether you like more generalist-oriented jobs being in contact with many people and projects or tend to become a specialist where you don't mind getting stuck into one complicated research question by yourself. The search might take longer than you expected, but try not to lose momentum and keep looking for the opportunities that you would both enjoy and like to contribute. If a company does not accept you, it may be because you wouldn't fit into the group dynamic. This may be personality-related, even if your competences are sufficient for a certain position. You should be aware that it's not that they have anything against you; rather that someone else might well fit into their unique environment better than you. Remember that the competition is hot, especially in the modern working environment. This means that you have to look for a company where your competences AND personality fits well in order to guarantee a satisfying job and also a good working climate.

I wish you lots of luck in your search! If you have further questions, please feel free to write to me at arzu\_tasci@yahoo.com

### **MEETING ANNOUNCEMENTS**

# 10<sup>TH</sup> INTERNATIONAL SYMPOSIUM ON COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING

11<sup>th</sup> – 14<sup>th</sup> April, 2012, Hotel Berlin, Berlin, Germany www.cmbbe2012.cf.ac.uk

#### Coordinators:

John Middleton, Sam L Evans, Cathy Holt (Cardiff University, UK), Antonius Rohlmann and Bill Taylor (Charite University, Berlin, Germany), Christopher Jacobs (Columbia University, USA)

### Submission of Abstracts

We are pleased to invited participants to submit one page abstracts which focus on the symposium topics and special sessions. New innovations in both theoretical and applied biosimulation are welcome. Please note that papers will be reviewed on a continuous basis up the closing date for abstract submission which is 16<sup>th</sup> December 2011. To submit an abstract see link at:

http://www.cmbbe2012.cf.ac.uk/abstract.asp.

Abstracts should be submitted (250 words max with no fig.) in MS Word (.doc) or Adobe Acrobat (.pdf) and then emailed to <a href="mailto:faruquer@cf.ac.uk">faruquer@cf.ac.uk</a> and <a href="mailto:middletonj2@cf.ac.uk">middletonj2@cf.ac.uk</a>.

DEADLINE FOR ABSTRACTS - 16<sup>th</sup> December 2011 ACCEPTANCE OF ABSTRACTS - 22<sup>nd</sup> December 2011

### SYMPOSIUM FORMAT

- 30 Plenary presentations by renowned International speakers
- 30 Oral and 6 poster presentation sessions by Contributed Authors
- 14 Special sessions on emerging topics
- Software and medical technology exhibits by leading organisations
- Substantial Sponsored prizes for best research papers and posters

Young researchers are very welcome with reduced fee together with significant student prizes

### THE COMPUTATIONAL FLUID DYNAMICS (CFD) IN MEDICINE AND BIOLOGY CONFERENCE

March 25<sup>th</sup> -30<sup>th</sup> 2012, Israel. http://www.engconfintl.org/12ad.html.

A Conference to Honor Shmuel Einav on the Occasion of his 70th Birthday. Professor Ada Yonath, the 2009 Nobel Chemistry Laureate from the Weizmann Institute of Science in Israel, will deliver the Keynote Lecture of the Opening Ceremony.

Time & Venue: March 25-30, 2012 Crowne Plaza Dead Sea, Ein Bokek, Dead Sea, Israel

General Announcement and Call for Abstracts Abstract Submission Deadline: September 30, 2011.

### **SOCIETY NEWS**

# First Meeting of the Spanish National Chapter of the ESB

The First Meeting of the Spanish National Chapter of the ESB was held the last 10<sup>th</sup> of November in Zaragoza. It was organized by María Angeles Pérez Ansón. She is member of the research group Multiscale in Mechanical and Biological Engineering (M2BE) of the Aragón Institute of Engineering Research (I3A) of the University of Zaragoza. The event was success in all the aspects, with a high number of participants (more than 80 researchers and 40 research works) and with a high quality of all the presented works. The chapter meeting was organized into oral presentations, delivered by PhD students of the different research groups that are involved in research in biomechanics and specifically in the ESB.

During the event, the General Assembly took place, where the ESB members of the Chapter voted for the candidates to the Executive Board of the Chapter.

There were 6 candidates: Francisco Javier Alonso Sánchez (Universidad Castilla-La Mancha), Miguel Cerrolaza Rivas (Universidad Politécnica de Cataluña), Jérôme Noailly (Institute for Biengineering of Catalania), María Angeles Pérez Ansón (Universidad de Zaragoza), Guillermo Rus Carlborg (Universidad de Granada) and José Antonio Sanz Herrera (Universidad de Sevilla).

The final vote defined the Executive Board, constituted by María Angeles Pérez Ansón (as President of the Chapter), José Antonio Sanz Herrera and Jérôme Noailly.

Congratulations to all of them!!!

For additional details of the event you can visit the web page: <a href="http://capituloesb.unizar.es/index.php">http://capituloesb.unizar.es/index.php</a>

# The First General Assembly of the Italian National Chapter of the ESB

After the official creation of the Italian National Chapter in March 2011, the First General Assembly of the Chapter took place at Istituto Ortopedico Rizzoli, Bologna, on September 12<sup>th</sup> 2011. After a presentation about the creation process and the aims of the ESB National Chapters, given by Gabriele Dubini, Secretary-General, the election of the Executive Board of the Chapter took place. The electoral committee was formed by Monica Soncini (Milano) and Rita Stagni (Bologna). The Secretary-General presented the six candidates running for election. The ballot was run according to the ESB procedure rules: each member present and in good standing received a

sheet with the list of the six candidates to be ticked. Only three votes could be expressed. 26 active members were present and expressed their vote. The members elected to the Executive Board were Luca Cristofolini (Bologna), Francesca Di Puccio (Pisa) and Fulvia Taddei (Bologna).

In the afternoon two scientific sessions took place where ESB members from a number of Italian research institutions provided an overview on the research in biomechanics under way at their centres.

In the following day the three elected members and the Secretary-General met for the first Executive Board meeting of the Chapter. Francesca Di Puccio, who had received the largest number of preferences, was unanimously proposed as the President of the Italian Chapter.



Congratulations...

.... to ESB society members Liesbet Geris, Christian Hellmich, Danny Kelly, Damien Lacroix and Laoise McNamarra, who were all awarded ERC grants from the European Commission this year.

Work in the tissue engineering field has received much attention from the European Commission this year, particularly theoretical modelling of tissue engineering processes and experiments, which has long been needed in the field. For example, the project of Lies Geris is focused on bone tissue engineering and is aimed at providing some proof of concept for an in silico model-driven approach that can be used for making robust predictions of outcomes of lab experiments. Likewise, the project of Damien Lacroix concerns modelling of tissue engineering with an integration of the microscopic modelling of cells with the macroscopic modelling of porous scaffolds, particularly looking at the interactions of individual cells with the scaffolds and with neighbouring cells. The outcome of such projects should lead to a better understanding of the local mechanical stimuli on cells and the translation of mechanical macroscopic loading to microscopic loading, and to the biological responses of cells.

### **MEMBERSHIP NEWS**

A very warm welcome to the new members who have joined us since spring 2011! The total membership of the European Society of Biomechanics is now 752.

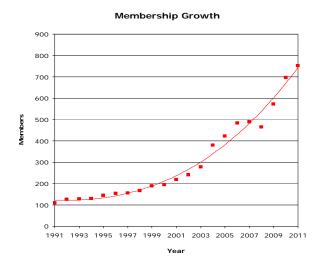
### Welcome to the following new ESB members:

Javier Alonso Sánchez, Andreas Anayiotos, Ferdinando Auricchio, Martin Bayley, Cristina Bignardi, Miguel Cerrolaza, Duanduan Chen, Gianfranco Fiore, Carole Leguy, Prashanta Kumar Mandal, Fiona McEvoy, Abeye Mekonnen, Fanjie Meng, Simone Morganti, Ignacio Ochoa, Piero Pavan, Antonio PérezGonzález, Sebastien Roth, Guillermo Rus, Joaquín L. Sancho-Bru, Monica Soncini, Vincent Stadelmann, Dan Ioan Stoia, Triantafyllos Stylianopoulos, Gaia Volandri, Alexander Zwahlen.

ESB Membership Campaign – renew your ESB membership and take advantage of the ESB2012 reduced congress registration fee!

By the beginning of November, you will be invited to renew your ESB membership. In order to take advantage of the reduced congress registration fee at the 18<sup>th</sup> ESB Congress, it is required that

you pay your 2012 ESB membership fee prior to registering for the congress. To avoid any administrative overhead, please renew your ESB membership before the end of the year.



As every year, the 2012 membership campaign is organized electronically, through an online procedure on the ESB website. You will receive an email with a weblink that leads you directly to the membership renewal page. While going through the payment procedure you will be requested to check and, if necessary, update your personal and profile data. After completing the personal and profile data, you will be guided automatically to the payment webpage, where you can opt for either online payment (by credit card, through PayPal) or payment by bank transfer. In case of online payment, you will receive an electronic receipt upon completion of the transaction. In case you opt for payment by bank transfer, an email will be sent to you that contains all necessary bank details. Again, once we have received your payment, you will receive an electronic receipt.

If you have questions, or if you encounter any problems during payment, do not hesitate to contact the ESB treasurer at <a href="mailto:treasurer@esbiomech.org">treasurer@esbiomech.org</a>.

Being an electronic membership campaign, it is crucial that ESB has your correct email address. If your email address has changed, please update it in your personal data. You can update your personal data online after login (http://www.esbiomech.org/Account/modifyYourPerson alData). If you forgot your username and/or password, consult the FAQ our website at (http://www.esbiomech.org/Html/15).

The ESB offers reduced subscription to a number of journals (see below) for all membership categories. In order to ensure continuation of your journal subscriptions we would like to ask you to pay your membership and journal subscription fees before the end of the year.

### **Journal subscriptions**

ESB is affiliated with the Journal of Biomechanics and Clinical Biomechanics, both published by Elsevier. As part of this affiliation, each member has the option to purchase a personal subscription. The fee for this subscription is a special reduced rate arranged between the ESB and Elsevier. The subscription is for both print and online access.

As for previous years, ESB members are also eligible to receive optional journal subscriptions at special reduced rates, arranged with Elsevier (The Knee, The Foot, Gait and Posture, Journal of Electromyography and Kinesiology), Taylor & Francis (Computer Methods in Biomechanics and Biomedical Engineering, Applied Bionics and Biomechanics, Footwear Science) and Springer (Biomechanics and Modeling in Mechanobiology).

Information on online access to Journal of Biomechanics and Clinical Biomechanics can be found on the ESB website (<a href="http://www.esbiomech.org/JBM-ESB.pdf">http://www.esbiomech.org/JBM-ESB.pdf</a> and <a href="http://www.esbiomech.org/Clin%20Biomech%20online">http://www.esbiomech.org/Clin%20Biomech%20online</a> and <a href="http://www.esbiomech.org/Clin%20Biomech%20online">http://www.esbiomech.org/Clin%20Biomech%20online</a> %20access%20to%20members.pdf respectively). For online access to other journals, subscribers will be contacted directly and individually by the publishers (if provided).

Please remember that all journal subscriptions through the ESB must be treated as personal copies and cannot be used in libraries.

Journal of Biomechanics and Clinical Biomechanics are included in the HINARI program (http://www.who.int/hinari/en/).

Reduced subscription rates can be found on <a href="http://www.esbiomech.org/Section/affiliated-journals">http://www.esbiomech.org/Section/affiliated-journals</a>.

Journal subscription rate 2012 (VAT included)	
Journal of Biomechanics (print & online)	
Clinical Biomechanics (print and online)	€93
The Knee (print only)	€95
The Foot (print only)	€135
Gait and Posture (print and online)	
Journal of Electromyography and Kinesiology (print only)	€119
Computer Methods in Biomechanics and Biomedical Engineering (print and online)	€88
Biomechanics and Modeling in Mechanobiology (print & online)	
Applied Bionics and Biomechanics (print only)	
Footwear Science (print only)	

### **ADDITIONAL NEWS**

The International Foot and Ankle Biomechanics Community i-FAB (<a href="http://www.i-FAB.org">http://www.i-FAB.org</a>) aims to connect people from all countries, disciplines and sectors who have an interest in foot and ankle biomechanics.

i-FAB is a non-profit international community of all people interested in foot and ankle biomechanics, with the aim of supporting a range of coordinated, collaborative and community wide activities improve the effectiveness and productivity of foot biomechanics research.

i-FAB is not a new biomechanics society, technical group, association, interest group or any other traditional form of scientific organisation. It is an initiative and a project designed to establish a new method of working for anyone interested in foot and ankle biomechanics.

i-FAB so far has more than 800 members from more than 70 countries. Membership in i-FAB is free. The community welcomes members from a wide range of sectors and backgrounds, from academics, physicians, podiatrists, surgeons, and other health professionals, to members of the footwear, insole, surgery and related industries. i-FAB has an open philosophy and connecting people across traditional disciplinary boundaries is one of its key objectives.

The goals of the i-FAB community are:

- to connect people working in the foot and ankle biomechanics domain regardless of location and discipline to promote integration of research activities
- to accelerate research developments
  - to facilitate debate on key issues for the community
- to enable better co-ordination of multidisciplinary research
- to build international activities to address common research challenges

The principle i-FAB activity is a collaborative workspace (<a href="http://moodle.i-fab.org">http://moodle.i-fab.org</a>) for communicating research issues in the area of foot and ankle biomechanics, with the aim of connecting researchers around the world. This online platform for presenting, storing, retrieving and contributing to information, data and the activities within a global community is a new and easy-to-use way for working collaboratively and acting as an international community.

In addition, every two years the i-FAB community organises a congress. The 1st and 2nd i-FAB congresses, Bologna (Italy) 2008 and Seattle (USA) 2010, were attended by 180 and 280 people from about 30 countries. The 3<sup>rd</sup> i-FAB Congress is taking place at the University of Sydney in Australia, from April 11-13<sup>th</sup>, 2012.

### SPONSOR'S PAGE

The ESB Sponsor Materialise Co. recently announced the release of the Mimics Innovation Suite, which makes the 3D surface modelling of imaging data faster and more user-friendly.

With this release, Mimics now offers integration with the User Community, multiple core support, a new import wizard, and an auto-save function that is up to 90% faster than currently available. Another useful feature is the ability to change parameters without waiting (when strict parameters are used, this can cause long calculations; it is now possible to stop these calculations midway and change the parameters, saving valuable time). Likewise, their upto-date version of 3-matic introduces new features

such as an improved user interface, adaptive remeshing, the ability to change parameters during a calculation, an Expert Mode, and quick labeling. In addition, there are two new modules to discover for the reverse engineering of medical data and the analysis of parts. For more information on these software updates please see <a href="https://www.materialise.com">www.materialise.com</a>.









