

# BRUSSELS HAND/UPPER LIMB INTERNATIONAL SYMPOSIUM

Genval  
Brussels, Belgium  
January 29-30, 2010

*18<sup>th</sup> year*



**NEW TECHNOLOGIES  
AND INNOVATIONS  
IN HAND/WRIST/UPPER LIMB  
SURGERY**



**Final  
Programme**

[www.brusselshandsymposium.eu](http://www.brusselshandsymposium.eu)

# SCIENTIFIC PROGRAMME

## Thursday, January 28, 2010

- 16.00-19.00            Registration  
19.00                    Free evening

## Friday, January 29, 2010

- 07.30-08.30    Registration – Coffee and Croissants
- 08.30-10.10    SESSION 1: AN INTRODUCTION TO THE SYMPOSIUM (1)**  
(Moderators: H. Yokoi, L. van Overstraeten)
- 08.30            **Opening Address**  
F. Schuind (Brussels, Belgium)
- 08.35            **Tactile Roughness Discrimination Threshold is Unrelated to Tactile Spatial Activity**  
X. Libouton, O. Barbier, L. Plaghki, J.L. Thonnard (Brussels, Belgium)
- 08.45            **Virtual Navigation for Upper Limb, Regional Anesthesia, Pain Clinic and Surgery**  
P. Pandin (Brussels, Belgium)
- 08.55            **Cellular Implant Improves Surgical Outcome in Dupuytren Disease**  
I. Degreeef (Leuven, Belgium)
- 09.05            **Electrical Stimulation of Bone Healing**  
M. Hinsenkamp (Brussels, Belgium)
- 09.15            **Dynamic versus Quasi-Dynamic In Vivo Carpal Bone Kinematics during Flexion-Extension and Radio-Ulnar Deviation of the Wrist**  
M. Foumani, S.D. Strackee, R. Jonges, L. Blankevoort, A.H. Zwinderman, B. Carelsen, G.J. Streekstra (Amsterdam, the Netherlands)
- 09.23            **Current Trends of Cartilage Defects in the Upper Limb, considering Future Evolution**  
F. Almqvist (Ghent, Belgium)
- 09.33            **Complex Reconstructive Arthroscopic Surgery of the Wrist: how far we can go ?**  
P.C. Ho (Hong Kong SAR, China)
- 09.43            **New Surgical Concept to Treat Kienböck's Disease**  
E. Camus, L. van Overstraeten (Maubeuge, France and Tournai, Belgium)
- 09.51            **Discussion**
- 10.20            Coffee break and Visit of the Commercial Exhibition

**10.50–12.00 SESSION 2: AN INTRODUCTION TO THE SYMPOSIUM (2)**

(Moderators: E. Vögelin, J. Bahm)

- 10.50      **“Half-millimeter” Microsurgery Ushers in a New Era of Surgery**  
N. Kuroshima (Tokyo, Japan)
- 11.00      **The Future of Robotics in Hand Surgery**  
Ph. Liverneaux (Strasbourg, France)
- 11.10      **Possibilities of Tolerance Induction for Partial Hand Transplantation**  
Ph. Lemaitre, A. Le Moine, F. Schuind (Gosselies, Brussels, Belgium)
- 11.20      **Nerve Transfers in Upper Limb Nerve Injuries**  
J. Bahm (Aachen, Germany and Brussels, Belgium)
- 11.30      **Current Trends in Upper Limb Functional Evaluation**  
P. Salvia, S. Van Sint Jan, V. Feipel, M. Rooze (Brussels, Belgium)
- 11.40      **Discussion**
- 12.00      Lunch and visit of the Commercial Exhibition
- 14.00-15.25 SESSION 3: ADVANCES IN HAND BIOMECHANICS AND SCAPHOID FIXATION**  
(Moderators: O. Barbier, V. Feipel)
- 14.00      **Kinematic Evaluation of the Finger’s Interphalangeal Joints Coupling Mechanism**  
J. Leijnse, P.M. Quesada, C.W. Spoor (Brussels, Belgium, Louisville, KY, USA, and Rotterdam, the Netherlands)
- 14.08      **Discussion**
- 14.13      **Individuated Surface EMG and Neuroprosthesis Homogeneous Electrostimulation of the Extensor Digitorum Communis – Anatomic Basis and EMG Validation**  
J. Leijnse, S. Carter, A. Gupta A, S. McCabe (Brussels, Belgium and Louisville, KY, USA)
- 14.21      **Discussion**
- 14.26      **Statistical Descriptions of Scaphoid and Lunate Bone Shapes**  
M. van de Giessen, M. Foumani, G.J. Streekstra, S.D. Strackee, M. Maas, L.J. van Vliet, C.A. Grimbergen, F.M. Vos (Delft, the Netherlands)
- 14.34      **Discussion**
- 14.39      **Arthroscopic Treatment of Scaphoid Nonunion**  
P.C. Ho (Hong Kong SAR, China)
- 14.47      **Computer-Assisted Planning of Carpal Scaphoid Fractures Screwing**  
Th. Leloup, M. Renard, W. El Kazzi, F. Schuind (Brussels, Belgium)
- 14.57      **Kirschner Wire Placement in Scaphoid Bones using Fluoroscopic Navigation: a Cadaver Study Comparing Conventional Techniques with Navigation**  
Ph. Liverneaux (Strasbourg, France)

- 15.05 **Percutaneous Transtrapezial Scaphoid Fixation does not Lead to Scaphotrapezial Arthritis: a long term Radiographic Follow-Up Study**  
G.F.A.E. Geurts, R.P. van Riet, F. Verstreken (Deurne, Belgium)
- 15.13 **Discussion**
- 15.25 Coffee break and Visit of the Commercial Exhibition
- 15.55-17.20 **SESSION 4: ADVANCES IN WRIST IMAGING AND ARTHROSCOPY**  
(Moderators: P.C. Ho, L. De Smet)
- 15.55 **In vitro Carpal Kinematics of the Wrist Acquired by the New Developed Four Dimensional Rotational X-Ray Imaging System: the Effect of Tendon Load on Carpal Kinematics**  
M. Foumani, L. Blankevoort, N. Dvinskikh, R. Jonges, G.J. Streekstra, S.D. Strackee (Amsterdam, the Netherlands)
- 16.03 **Discussion**
- 16.08 **MR Arthrography versus Enhanced MRI of the Wrist**  
M. Shahabpour, B. Allemon, K. Drossos, J. Goubau (Brussels, Brugge, Belgium)
- 16.18 **Discussion**
- 16.23 **MRI and Arthroscopy of Normal and Pathological Extrinsic Ligaments**  
M. Shahabpour, L. Van Overstraeten, P. Ceuterick, L. Kinnen (Brussels, Tournai, Belgium)
- 16.31 **Discussion**
- 16.36 **New Biomechanical Approaches of Wrist Instabilities with Arthroscopical Analysis**  
L. van Overstraeten, E. Camus (Tournai, Belgium and Maubeuge, France)
- 16.46 **An Anterior Portal in Wrist Arthroscopy**  
L. De Smet (Leuven, Belgium)
- 16.54 **Arthroscopical Criteria to Date Trauma of Wrist**  
L. van Overstraeten, E. Camus (Tournai, Belgium and Maubeuge, France)
- 17.02 **Discussion**
- 17.20-18.00 **SESSION 5: INNOVATIONS IN THE TREATMENT OF DEGENERATIVE CARPAL CONDITIONS**  
(Moderators: Ph. Liverneaux, F. Stockmans)
- 17.20 **Use of Artelon and Cartilage Plugs to Resurface Limited Areas of Cartilage Wear in the Wrist**  
R. Wollstein (Pittsburgh, USA)
- 17.28 **Discussion**
- 17.33 **The Effect of Lunate Position on Postoperative Range of Motion after a Four-Corner Arthrodesis Procedure: a Biomechanical Simulation Study**  
N.A. Dvinskikh, L. Blankevoort, S.D. Strackee, G.J. Streekstra (Amsterdam, the Netherlands)
- 17.41 **Discussion**

- 17.46 **Contribution of Computer Assisted Surgery in Total Wrist Prosthesis: a Comparative Study of Eight Cases**  
Ph. Liverneaux (Strasbourg, France)
- 17.54 **Discussion**
- 18.00-18.30 **SESSION 6: INNOVATIONS IN HAND AND WRIST IMAGING AND RECONSTRUCTION - ROUND TABLE AND CASE PRESENTATIONS**  
(Moderators: F. Schuind, W. El Kazzi)
- 18.30 Cocktail in the Château
- 19.30 Free Evening

## Saturday, January 30, 2010

- 08.30-10.20 **SESSION 7: ADVANCES IN THE MANAGEMENT OF UPPER EXTREMITY FRACTURES**  
(Moderators : R. van Riet, K. Drossos)
- 08.30 **Design of an Articulated Mini-Fixation Device for Proximal Interphalangeal Joint Finger Fractures**  
T. Leloup, A. De Greef, S. Bantuelle, W. El Kazzi, G. Mannaert, N. Warzée, F. Schuind, A. Delchambre (Brussels, Belgium)
- 08.38 **Discussion**
- 08.43 **Experimental Increase of Osteoporotic Distal Radius Strength using a Calcium Phosphate Cement**  
Ph. Liverneaux (Strasbourg, France)
- 08.51 **AlloMatrix Bone Graft in a Distal Radial Fracture Model. A Prospective Randomized Controlled Clinical Trial**  
P. D'Agostino, O. Barbier (Brussels, Belgium)
- 09.01 **Discussion**
- 09.11 **Development of Surgical Guides for Osteotomies**  
F. Stockmans (Kortrijk, Belgium)
- 09.21 **Discussion**
- 09.26 **Anatomical Fit of Six Different Radial Head Plates**  
K.J. Burkhart, T.E. Nowak, Y. Kim, P.M. Rommens, L.P. Müller (Mainz, Germany)
- 09.34 **Advances in Olecranon Osteosynthesis**  
R. van Riet (Deurne, Belgium)
- 09.42 **Discussion**
- 09.52 **Treatment of the Complex Intraarticular Fracture of the Distal Humerus with the Latitude-Elbow-Prosthesis - a Retrospective Study with Complication Analysis**  
L.P. Müller, K.J. Burkhart, S. Mattyasovszky, P.M. Rommens (Mainz, Germany)

- 10.00 **Hemiarthroplasty for Comminuted Distal Humerus Fractures of the Elderly**  
K.J. Burkhart, S. Nijs, S. Mattyasovszky, R. Wouters, D. Gruszka, T.E. Nowak, P.M. Rommens, L.P. Müller (Mainz, Germany and Leuven, Belgium)
- 10.08 **Discussion**
- 10.20 Coffee break and Visit of the Commercial Exhibition
- 10.40-13.15 **SESSION 8: INNOVATIONS IN ELBOW AND SHOULDER SURGERY**  
(Moderators: I. Degreeef, Fl. Mulpas)
- 10.40 **Advances in Muscular Modeling**  
F. Stockmans (Kortrijk, Belgium)
- 10.48 **Discussion**
- 10.53 **Tennis Elbow: What is the Evidence ?**  
R. van Riet (Deurne, Belgium)
- 11.01 **Discussion**
- 11.06 **The Arthroscopic Outerbridge Procedure in Elbow Surgery: Technique, New Indications and Safety of Procedure**  
I. Degreeef (Leuven, Belgium)
- 11.14 **Discussion**
- 11.19 **Total Elbow Replacement: Anything New?**  
R. van Riet (Deurne, Belgium)
- 11.29 **Radiocapitellar Joint Contacts after Bipolar Radial Head Arthroplasty**  
F. Mounghondo, W. El Kazzi, R. van Riet, V. Feipel, M. Rooze, F. Schuind (Brussels, Belgium)
- 11.37 **Discussion**
- 11.47 **Possibilities of Elbow Denervation**  
R. de Kesel, \*\*\* (Brussels, Belgium)
- 11.55 **Discussion**
- 12.00 **MR and CT Arthrography of GlenoHumeral Ligaments with Arthroscopic Correlation**  
M. Shahabpour, C. Boulet, F. Handelberg, N. Pouliart (Brussels, Belgium)
- 12.08 **Discussion**
- 12.13 **Have Mercy for the Long Biceps Tendon!**  
P. Blaimont (Brussels, Belgium)
- 12.21 **Biological Aspects of Rotator Cuff Healing**  
Fl. Mulpas (Brussels, Belgium)
- 12.31 **Gene Therapy to Enhance Tendon Healing**  
M. Jayankura (Brussels, Belgium)
- 12.41 **Advances in Techniques of Rotator Cuff Repair**  
Ph. Rotsaert (Brussels, Belgium)
- 12.51 **Discussion**

- 13.00      **Anterior and Posterior Scapular Impingement Associated with Two Different Reverse Shoulder Designs**  
C. Roche, R. Jones, P.H. Flurin, T. Wright, L. Crosby, M. Mauldin, J. Zuckerman (Gainesville, FL, Augusta, GA, Ashville, NC, New York, NY, USA and Bordeaux-Merignac, France)
- 13.08      **Discussion**
- 13.15      Lunch and visit of the Commercial Exhibition
- 14.30-15.20      SESSION 9: ADVANCES IN NERVE REPAIR**  
(Moderators : J. Bahm, W. El Kazzi)
- 14.30      **Reconstruction of High Ulnar Lesions by Distal End-to-Side Medio-Ulnar Nerve Transfer**  
O.C. Aszmann, G. Furtmüller, O. Schuhfried, M. Frey (Vienna, Austria)
- 14.38      **Processed Allografts and Type I Collagen Conduits in Peripheral Nerve Surgery**  
E. Vögelin (Bern, Switzerland)
- 14.46      **Neuroma Prevention by End-to-Side Neurorraphy: Experimental Observations and Preliminary Clinical Experience**  
O.C. Aszmann (Vienna, Austria)
- 14.54      **Discussion**
- 15.05      **Shoulder Reconstruction Options in Patients with Brachial Plexus Injury**  
B. Elhassan, (Rochester, MN, USA)
- 15.13      **Discussion**
- 15.20-16.15      SESSION 10: INNOVATIONS IN MICROVASCULAR REPAIR**  
(Moderators: N. Kuroshima, A. Carlier)
- 15.20      **Needle Penetration Injury on Vessels 0.3 mm in External Diameter - To Cultivate "Half-millimeter" Microsurgery**  
K. Fukasawa, N. Kuroshima, M. Kimura, T. Matsushita (Tokyo, Japan)
- 15.28      **Discussion**
- 15.33      **Treatment of Difficult Nonunions of Forearm with a Free Vascularised CorticoPeriosteal Flap from the Medial Condyle of the Femur**  
L. De Smet (Leuven, Belgium)
- 15.43      **Discussion**
- 15.48      **Degloving Injuries to the Hand - Treatment with Greater Omentum Pedicled Flap**  
A. Zyluk (Szczecin, Poland)
- 15.56      **Omental Flaps in Treatment of Chronic Osteomyelitis - Illustration of Three Cases**  
A. Domanasiewicz, L. Kaczmarzyk, J. Kaczmarzyk, J. Jabłeczki (Krakow, Poland)
- 16.04      **Discussion**

**16.15–17.30 SESSION 11: ADVANCES IN PROSTHETICS, REHABILITATION AND EVALUATION**

(Moderators: O.C. Aszmann, J.L. Thonnard)

16.15 **EMG Intelligent Prosthetic Hand**

*H. Yokoi (Tokyo, Japan)*

16.25 **Discussion**

16.30 **Selective Nerve Transfers for Improved Controlling and Integration of Myoelectric Artificial Limbs**

O.C. Aszmann, H. Dietl, M. Frey (Vienna, Austria)

16.40 **Discussion**

16.45 **Reflex Walking Assist System**

H. Yokoi (Tokyo, Japan)

16.53 **Discussion**

16.58 **New Developments in Hand Physiotherapy**

D. Mouraux, Ch. Robert (Brussels, Belgium)

17.08 **Discussion**

17.13 **Analysis of Patients after Shoulder Trauma Depending of their Ordinary Condition**

A. Poposka, E. Popova Ramova ( Skopje, Bitola, Macedonia)

17.21 **Discussion**

**17.30–17.50 SESSION 12: NEW TECHNOLOGIES AND INNOVATIONS IN HAND/WRIST/UPPER LIMB SURGERY – GENERAL CONCLUSIONS**

(Moderators : F. Schuind, J. Bahm, W. El Kazzi)

17.30 **Ten Questions to the Floor and the Faculty – Case Presentations**

17.40 **Summary and Conclusions**

F. Schuind, J. Bahm, W. El Kazzi (Brussels, Belgium)

17.50 **Health Break (Sports or Access to the Center of Fitness)**

18.30 **Social Program: optional**



# SYMPOSIUM INFORMATION

<http://www.brusselshandsymposium.eu>

## SYMPOSIUM VENUE

Château du Lac,  
Avenue du Lac 87  
1332 Genval  
Belgium

## REGISTRATION FEES

	Before December 10	After December 10
Regular Delegate (1)	470	500
Resident/Student (2)	350	350
Physiotherapist/Nurse	350	350
<i>Optional: touristic visit and banquet (Jan. 30, 2010) (3)</i>	100	100

- (1) Fees include meeting attendance, congress bag with the abstract book and all related documents (certificates of payment and attendance, badge etc.), lunches, welcome reception on January 29, and transport by coach from and to the airport on January 28 and January 31. Not included: hotel accommodation, meals except 2 lunches, access to sports facilities. Acknowledgement of registration and receipt of fees will be sent soon after the registration form and full payment are received. Upon request, a letter of invitation will be sent. Payments should be made free of all bank charges and commissions. The organizers cannot be held responsible for any personal injury, loss, damage, accident to private property, or additional expenses incurred as a result of delays or changes in air, rail, sea, road or other services, strikes, sickness, weather, war, sports and other causes. Luggage is at owners risk throughout unless insured.
- (2) Please include a certificate signed by head of department.
- (3) Included: coach transport Genval-restaurant, touristic visit, and dinner in a typical Belgian restaurant.

## CANCELLATION

In the event of cancellation, a full refund (less € 100 as a handling fee) of the registration fees may be obtained, provided that written notification is received by December 15, 2009. A 50 % refund will be made for cancellations received by January 15, 2010. No refunds will be made thereafter.

## ACCOMMODATION

### **Château du Lac (5 stars hotel) (Venue)**

15 km south of Brussels. An invigorating and sophisticated ambience, exquisite décor, fine cuisine. Free access available at the 'John Harris Fitness Centre' for participants accommodated at the Château. Indicative rate: single 195 €/night with breakfast.

#### Address:

Château du Lac, avenue du Lac, 87, B-1332 Genval, Belgium  
Tel.: + 32 2 655 71 11 - Fax + 32 2 655 74 44  
E-mail: seminars.cdl@martinshotels.com

When contacting the hotel, please indicate that you are attending the "Hand/Upper Limb Symposium" to receive the reduced rate for the dates January 28 through January 31.

Participants can also be accommodated at the hotel "**Le Lido**"; a 3 stars hotel located about 2 km from the Château du Lac (no transport will be provided). Indicative rate: single 160 €/night with breakfast.

#### Address:

Le Lido, 20, rue de Limal Sart, B-1332 Rixensart, Belgium  
Tel.: + 32 2 634 34 34 - Fax +32 2 634 34 44  
E-mail: lelido@martinshotels.com

## SECRETARIAT

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