

BRUSSELS HAND/UPPER LIMB INTERNATIONAL SYMPOSIUM

Genval
Brussels, Belgium
February 4-5, 2011

19th year



SENSATION, MOVEMENT AND STRENGTH !

**Pre-congress half-day laboratory workshop on
biomechanical techniques as applied to hand/upper
extremity evaluation
February 3, 2011 (afternoon)**



Preliminary Programme

www.brusselshandsymposium.eu

PRELIMINARY PROGRAMME

Thursday, February 3, 2011

- 10.00 - 17.00 Registration
- 13.00 – 19.00 **Precongress Half-Day Laboratory Workshop on Biomechanical Techniques as Applied to Hand/Upper Extremity Evaluation**
Medical Faculty of the Université libre de Bruxelles (ULB, Brussels)
- 13.00 Departure of the bus, Château du Lac, Genval
- 14.00 – 16.40 Visit of Various Stations of Biomechanical Research**
- 16.40 Coffee-break
- 17.00 – 18.00 **Open Discussion, Clinicians and Engineers (moderator: M. Rooze)**
- 18.00 – 19.00 Return by bus to Genval**
- 19.00 Free evening

Friday, February 4, 2011

- 07.30 – 17.00 Registration
- 08.30 – 10.30 Session 1: An Introduction to the Symposium (1)**
(Moderators: R. Berger, W. El Kazzi)
- 08.30 **Opening Address**
F. Schuind, J. Bahm (Brussels, Belgium and Aachen, Germany)
- 08.40 **Anatomical Variations in the Thoracic Outlet**
A. Carlier (Liège, Belgium)
- 09.00 **Traction Regeneration of Peripheral Nerves**
S.M. Awais (Lahore, Pakistan)
- 09.20 **Lower Extremity Neurotisations**
E. Vögelin (Bern, Switzerland)
- 09.40 **Fingerpad Sensitivity is not Required for Tactile Roughness Discrimination**
X. Libouton, O. Barbier, L. Plaghki, J.L. Thonnard (Brussels, Belgium)
- 10.00 **Discussion**
- 10.30 Coffee break and Visit of the Poster and Commercial Exhibitions

10.50-12.50 Session 2: An Introduction to the Symposium (2)

(Moderators: E. Vögelin, J.L. Thonnard)

- 11.00 **What do we Know about Mechanoreceptors: Morphology and Function**
R.A. Berger, E.J. Berger (Rochester, MN, USA)
- 11.20 **Surface Electromyography, Muscle Force and Mechanical Output in Healthy and Pathological Upper Extremity Movements**
C. Disselhorst-Klug, J. Bahm, T. Kleiber, G. Rau (Aachen, Germany)
- 11.40 **Specificity of Muscle Activation during Different Types of Contraction: Implication for Rehabilitation Treatments**
J. Duchateau (Brussels, Belgium)
- 12.00 **How to Avoid an Arthrodesis of the Wrist**
L. De Smet (Leuven, Belgium)
- 12.20 **New Generation of Braces in Hand, Wrist and Upper Extremity Applications**
E.Y.S. Chao (Rochester, MN, USA)
- 12.40 Discussion
- 12.50 Lunch and visit of the Commercial and Poster Exhibitions

14.00 - 16.45 Session 3: Sensation

(Moderators: A. Carlier, J. Bahm)

- 14.00 **Enhancement by Tacrolimus of Nerve Regeneration**
Z. Du Phan, W. El Kazzi, F. Schuind (Brussels, Belgium)
- 14.10 **Nerve Regeneration after Hand Transplantation**
F. Schuind, C. Van Holder, W. El Kazzi, D. Mouraux, Ch. Robert, M. Rummelink (Brussels, Belgium)
- 14.20 Discussion
- 14.30 **Effects of a Temporary Cutaneous Anaesthesia of the Forearm on the Sensitivo-motrice Function of the Hand**
D. Mouraux, S. Malget, Ch. Robert, V. Gangji, N. Mathieu (Brussels, Belgium)
- 14.40 Discussion
- 14.45 **Textural Vibrations in the Forerarm during Tactile Exploration**
B. Delhay, V. Hayward, P. Lefèvre, J.L. Thonnard (Brussels, Belgium and Paris, France)
- 14.55 **Rasch Built Measure of Pleasant Touch elicited through Active Exploration**
A. Klöcker, C. Arnould, M. Penta, J.L. Thonnard (Brussels, Montignies-sur-Sambre, Belgium)
- 15.05 Discussion
- 15.15 **Nerve Compressions about the Elbow**
R. van Riet (Deurne, Brussels, Belgium)
- 15.25 Discussion

- 15.30 **Median Nerve Compression in the Forearm: Pronator versus Kiloh-Nevin Syndrome**
I. Degreef, L. De Smet (Leuven, Belgium)
- 15.40 Discussion
- 15.45 **Distribution of Nerve Endings in Human Distal Interphalangeal Joint and Surrounding Structures**
T. Chikenji, R.A. Berger, M. Fujimiya, D. Suzuki, S. Subota, K.N. An (Rochester, MN, USA and Sapporo, Japan)
- 15.55 Discussion
- 16.00 **Techniques for the Evaluation of Proprioception**
V. Feipel, P. Salvia, M. Rooze (Brussels, Belgium)
- 16.10 Discussion
- 16.15 **AnteroLabroligamentous Periosteal Sleeve Avulsion Lesions**
F. Mulpas (Brussels, Belgium)
- 16.25 **The Anterior and Posterior Interosseous Nerves: A Model for Studying Joint Innervation**
R.A. Berger, A.M. Gay (Rochester, MN, USA)
- 16.35 Discussion
- 16.45 Coffee break and Visit of the Poster and Commercial Exhibitions
- 17.05-18.20 Session 4: Movement (1)**
(Moderators: E.Y.S. Chao, V. Feipel)
- 17.05 **Clinical 3D Motion Analysis of the Upper Limb**
P. Salvia, F. Moiseev, V. Sholukha, C. Mahieu, O. Snoeck, V. Feipel, S. Van Sint Jan, M. Rooze (Brussels, Belgium)
- 17.15 Discussion
- 17.20 **Kinematic Determination of the Elbow Rotation Axis for Mini-Invasive Dynamic Fixation**
Th. Leloup (Brussels, Belgium)
- 17.30 Discussion
- 17.35 **4D Imaging of Wrist Joint Kinematics**
G.J. Streekstra, M. Foumani, R. Jonges, B. Carelsen, M. van de Giessen, L. Blankevoort, C.A. Grimbergen, S.D. Strackee (Amsterdam, The Netherlands)
- 17.45 Discussion
- 17.50 **Function Evaluation of the Extrinsic Wrist Ligaments using a 3D Biomechanical Model**
N.A. Dvinskikh, L. Blankevoort, S.D. Strackee, C.A. Grimbergen, G.J. Streekstra (Amsterdam, The Netherlands)
- 18.00 Discussion
- 18.05 **Reverse Engineering Finger Extensor Apparatus Morphology from Measured Coupled Interphalangeal Joint Angle Trajectories. A Generic 2-D Kinematic Model**
J.N.A.L. Leijnse, C.W. Spoor, F. Schuind (Brussels, Belgium)

18.15 Discussion

18.20 - 18.45 Session 5: Sensation, Upper Extremity Kinematics - Round Table, Poster and Case Presentations

(Moderators: G.J. Streekstra, M. Rooze)

18.45 Cocktail in the Château

19.30 Free Evening

Saturday, February 5, 2011

08.15 - 10.25 Session 6: Movement (2)

(Moderators: I. Degreeef, K. Cermak)

08.15 **Restoration of Elbow Flexion**
W. El Kazzi, J. Bahm, F. Schuind (Brussels, Belgium)

08.25 Discussion

08.30 **Arthroscopy for the Stiff Elbow**
R. van Riet (Deurne, Brussels, Belgium)

08.40 **Elbow Arthrolysis: Open versus Arthroscopic Technique**
I. Degreeef, L. De Smet (Leuven, Belgium)

08.50 Discussion

09.00 **Radiocapitellar Joint Arthroplasty : Preliminary Results**
I. Degreeef (Leuven, Belgium)

09.10 Discussion

09.15 **Early Prognostic Factors in Non-Osteoporotic Distal Radius Fractures. A Multivariate Analysis of Initial Trauma Radiographs**
A. Beumer, C. Adlercreutz, T.R. Lindau (Breda, The Netherlands, Derby, United Kingdom and Lund, Sweden)

09.25 **Biomechanical Comparison of Two Plating Techniques for Distal Radius Fractures**
A. Beumer, M.A. Deitch, S.M. Belkoff (Breda, The Netherlands and Baltimore, MD, USA)

09.35 **Virtual Planning and Computer Controlled Repositioning for Malunited Distal Radius Fractures**
J.G.G. Dobbe, S.D. Strackee, A.W. Schreurs, R. Jonges, B. Carelsen, J.C. Vroemen, C.A. Grimbergen, G.J. Streekstra (Amsterdam, The Netherlands)

09.45 Discussion

09.55 **Reconstruction of Isolated Scaphoid Dislocation with Carpal Dissociation, Associated with a Carpal Anomaly**
M.P. Somford, J.P.A.M. Vroemen (Amsterdam, Breda, The Netherlands)

- 10.05 **Neglected Dislocation of the Hamate Bone**
A. Kawas, K. Kumar, T. Abraham (Doha, Qatar)
- 10.15 Discussion
- 10.25 Coffee break and Visit of the Poster and Commercial Exhibitions
- 10.45 - 11.35 Session 7: Movement (3)**
(Moderators: L. De Smet, J. Leijnse)
- 10.45 **A Lactoferrin Polypeptide (PXL01) Reduces Adhesion Formations after Flexor Tendon Surgery. A Dose-Response Study**
M. Wiig, K. Olmarker, J. Håkansson, L. Ekström, M. Mahlapuu (Uppsala, Gothenburg, Sweden)
- 10.55 Discussion
- 11.05 **Flexion Contractures of PIP Joints**
E. Vögelin (Bern, Switzerland)
- 11.15 **Relationship between Extension Lack in Dupuytren's Contracture and Disability of the Hand**
L. De Smet (Leuven, Belgium)
- 11.25 Discussion
- 11.35 – 12.35 Session 8: Strength (1)**
(Moderators: O. Barbier, F. Schuind)
- 11.35 **Link Development in Response to Mechanical Load, Joint Stability as a Function**
G. Seress, K. Kovács, G. Lelle, M. Seress (Vác, Budapest, Hungary)
- 11.45 Discussion
- 11.50 **Muscle Transfers in Obstetrical Brachial Plexus Lesions**
J. Bahm (Aachen, Germany and Brussels, Belgium)
- 12.00 **Shoulder Reconstruction Options in Patients with Brachial Plexus Injury**
B. Elhassan (Rochester, MN, USA)
- 12.10 Discussion
- 12.20 **Validity of Gerber's Subscapularis Test**
P. Sepulchre, S. Beaudy, J. Duchateau, D. Scipioni, P. Blaimont, S. Borenstein (Brussels, Belgium)
- 12.30 Discussion
- 12.35 Lunch and visit of the Commercial and Poster Exhibitions

13.30 – 15.10 Session 9: Strength (2)

(Moderators: R. van Riet, D. Mouraux)

13.30 **Distal Rupture of Biceps Tendon**

K. Cermak, R. van Riet (Brussels, Deurne, Belgium)

13.40 Discussion

13.45 **Ultrasonographic Aspects of Partial Rupture of Triceps Brachii**

A. Poposka, E. Popova Ramova, L.J. Nikolov (Skopje, Macedonia)

13.55 **Triceps Tendon Ruptures**

R. van Riet (Deurne, Brussels, Belgium)

14.05 Discussion

14.15 **Localization of Forces Applied by the Hand during a Power Grip Task: Influence of Handle Diameter**

J. Rossi, L. Vigouroux, M. Foissac, L. Grelot (Villeneuve d'Ascq, Marseille, France)

14.25 **The Use of the Rapid Exchange Grip Test in Detecting Sincerity of Effort. Reproducibility, Sensibility, Specificity and Practical Application**

D. Mouraux, C. Robert, P.M. Dugailly, S. Fassin, E. Roux (Brussels, Belgium)

14.35 **Grip Strength Ratio Correlates Well with DASH Score in Hand Problems**

A. Beumer, P. Aspenberg, T.R. Lindau (Breda, The Netherlands, Linköping, Sweden and Derby, United Kingdom)

14.45 Discussion

14.55 **Relationship between Disability and Impairment (Motion and Gripping Force) in Reconstructive Wrist Surgery**

L. De Smet (Leuven, Belgium)

15.05 Discussion

15.10-15.40 Session 10: Sensation, Movement and Strength!

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

15.10 **Ten Questions to the Floor and the Faculty – Case and Poster Presentations**

15.30 **Summary and Conclusions**

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

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

17.00 **Social Program: optional**

Guided Visit (M-Museum – Leuven) and Congress Dinner (17h00 till 23h00)

Posters (February 4 and 5, 2011)

An Anatomical Study of the Structural Anatomy of the Sternoclavicular Joint

A. Van Tongel, P. MacDonald, J. Leiter, J. Peeler (Ghent, Belgium and Winnipeg, Canada)

Reliability of the Glenoid Plane

L.F. De Wilde, T. Verstraeten, W. Speeckaert, A. Karelse (Ghent, Belgium)

Hyperbaria as an Adjunctive Therapy in Replantation of Limbs

A. Domanasiewicz, A. Elsaftawy, L. Kaczmarzyk, J. Jabłeczki (Trzebnica , Poland)

Hand Enchondromas

N. Silva, L. Miragaia, D. Ferraz, A. Ferreira, R. Mendes, P. Lourenço, J. Neves (Vila Nova de Gaia, Spain)