

## Preliminary Program

BRUSSELS INTERNATIONAL SYMPOSIUM  
13<sup>th</sup> year

**IMPAIRED MOTION OF THE UPPER LIMB  
(PALSY, SPASTICITY, DYSKINESIA AND  
CONTRACTURES) :**  
**ADVANCES IN DIAGNOSIS AND  
RECONSTRUCTIVE TREATMENT**

**From fundamental neurosciences and biomechanics to  
medical and surgical treatment and rehabilitation**

**Genval/Brussels, Belgium  
March 18-19, 2005**

**Presymposium Hands-On Course on Upper Extremity  
Tendon Transfers, March 17, 2005 (Liège, Belgium)**



### **Program Director**

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Meeting place :

Château du Lac

Avenue du Lac, B-1322 Genval, Belgium

Tel. +32 2 655 71 11 – Fax +32 2 655 74 44

E-mail : [seminars.cdl@martins-hotels.com](mailto:seminars.cdl@martins-hotels.com)

See the final program on our web site :

[www.ulb.ac.be/erasme/orthogenval](http://www.ulb.ac.be/erasme/orthogenval)

## AIMS AND FORMAT

The first annual Brussels/Genval upper extremity symposium, held in May 1992, was on Advances in Hand and Wrist Biomechanics. Since this first meeting, the Château du Lac at Genval has hosted each spring the Brussels Upper Extremity Symposium, dedicated to a specific topic involving the hand and the upper limb. In 2004, the theme was “Advances in Peripheral Nerve Surgery and Regeneration”, bringing together over 90 participants from 22 different countries. On this occasion, progress in the understanding of the biological mechanisms regulating nerve regeneration, advances in neuropathology, in surgery, in postoperative enhancement of axonal growth and in evaluation of the results have been discussed. However, it is evident that operative nerve repair does not always lead to satisfactory functional results. Aberrant or mixed reinnervation may cause asynchronous activity, commonly called co-contraction. Alternatively, in case of insufficient reinnervation, the patient is left with paralysis and/or loss of sensation. Also, nerve repair is not always possible (CNS lesions or inflammatory/infectious/degenerative nerve afflictions). Some patients present with a pseudo-paralysis secondary to tendon rupture or to other traumatic or degenerative conditions. The treatment does not end with a paralyzed hand or upper extremity ! In a logical continuation of their scientific and educational efforts, the organizers invite you today to participate in the 13<sup>th</sup> Symposium, dealing with the secondary treatments that we can offer to such patients.

The classical techniques to restore function in a paralyzed upper extremity include tendon transfers (provided a satisfactory donor muscle is available and the joints are reasonably supple), tenodeses, capsulodeses, arthrodeses and osteotomies. The literature related to these “palliative” treatments is scarce, and the surgeon experiences difficulties in making the appropriate choice of the best transfer option for a particular patient, especially in complex clinical situations. Some examples. Triceps function is quite important in tetraplegic patients. Various tendon transfers can restore powerful elbow extension. After irreparable ulnar nerve palsy, many techniques have been proposed to restore grip strength, to correct claw hand deformity, and to improve prehension. On what bases should the clinician make his or her choice? Thumb movements and stability are physiologically dependant on the integrity of the radial, median, and ulnar nerves: special reconstructive efforts are mandatory to restore prehension, particularly in tetraplegia. Massive rotator cuff tears cannot always be repaired, and various tendon transfers have been proposed to solve these difficult situations. Beside the surgical difficulties, are these techniques biomechanically sound ? In the last decades, there has been progress in the knowledge of the

microanatomy of muscle and tendons. Biomechanical musculoskeletal models of the upper extremity are now available. Hierarchical functional scales have been developed to more precisely determine the operative indications. Surgical refinements of the techniques, including the use of free muscular transfers, new methods of bone fixation, of pulley construction, or intraoperative measurement of the force generated by the transferred muscle have been reported. One aim of the Symposium is to discuss the state-of-the art of these techniques, including biomechanical principles, technical difficulties, and innovations. The factors influencing the results, including age, quality of bone insertion, route, innervation of the transferred muscle (or quality of donor axon in case of a free flap) and time of ischemia will be established. New techniques emerge, including myo-electric orthoses and neuroprostheses. Physiotherapy is obviously extremely important, to ensure the best functional results in the shortest postoperative duration, including cortical re-orientation. The evaluation of the results, whatever the treatment modalities is another topic of the Symposium. Beside classical clinical examination and the use of patient-oriented questionnaires, new techniques have emerged, for example movement analysis coupled to electromyography, and functional MRI. At the opposite end of the spectrum to these methods to restore function, is the current place – if any – of amputation. Is amputation of a flail arm still an option ?

Upper extremity palsy occurring in a child may affect the growth of the limb. For example, the obstetric brachial plexus lesion causes muscular imbalance and shoulder and elbow osseous deformities. These skeletal abnormalities could be prevented by early tendon transfers, should nerve regeneration be insufficient. Another aim of the Symposium is to discuss the biomechanical causes leading to the skeletal deformities, as well as the potential remodelling effects of muscular rebalance.

The difficult problems of abnormal movements, whether of central or peripheral origin, including focal dystonia, will be one of the important topics of the Symposium. Since the emergence of botulinum toxin A, chemical or surgical neurotomies are less used to decrease muscle spasticity. The precise indications and practical modalities of such techniques, and of new techniques, including electrical nerve stimulation, specific physiotherapy and cerebral neurosurgical options will be discussed. Selected spastic patients can be helped by peripheral reconstructive surgery, but the indications should be defined with great caution.

Patients with upper extremity motor dysfunction experience difficulties in reintegrating their family and to return to work.

Social and professional reintegration aspects will be as well considered.

As always, the primary goals of the Brussels/Genval annual upper extremity symposium, gathering together in a first-class resort close to Brussels experts from different fields (the previous symposia have been attended by orthopedic, plastic and general surgeons, anatomists, physiotherapists, rheumatologists, anesthesiologists, pain specialists, radiologists, nuclear medicine scientists, pathologists, engineers and basic scientists), are to promote the exchange of ideas, to establish guidelines on a consensual basis, and to foster collaborative investigations among various specialists, in 2005 concerning impaired motion of the upper extremity. Much time will be set aside for the discussions. The Symposium will discuss neither nerve regeneration, covered in 2004 (including motor or sensory neurotization), nor pain management.

### **SPECIFIC AIMS**

- To summarize the state of knowledge of secondary medical and surgical treatments of impaired upper extremity motion, including aspects of anatomy, biomechanics and pharmacology ;
- To review concepts of biomechanical modelling to simulate paralysis, abnormal bone stresses, and functional transfer options ;
- To present the results of various protocols to treat spasticity, dystonia and in general abnormal hand/upper extremity motion ;
- To discuss indications and timing aspects of secondary treatments ;
- To evaluate new techniques as free muscular flaps, neuroprostheses, high frequency nerve stimulation, etc ;
- To discuss rehabilitation and to determine the most appropriate methods for objective assessment of the results ;
- To formulate on these bases recommendations to the medical community ;
- To discuss unsolved problems and potential solutions ;
- To explore future directions of investigation.

### **ADVANCED COURSE OF UPPER EXTREMITY TENDON TRANSFERS**

As an introduction to the symposium, an anatomic hands-on course will be organized on March 17th in the Department of Anatomy of the Université de Liège (Institut d'Anatomie Auguste Swaen, rue des Pitteurs 20, 4020 Liège – Tel : +32-4-366 51 91). The course is organized by A. Carlier and F. Schuind. The number of participants in this one-day course of surgical anatomy

is strictly limited to 30 participants, on a first-come first-serve basis. Experts will first present their anatomical demonstration, which the participants will follow on TV monitors. Each participant will then be invited to reproduce the dissection on a fresh specimen (one specimen per two participants). After the course, a CD-rom, based on the videos and dissections presented by the faculty, will be made available to the participants. Although scrubs and instruments will be provided, it is recommended that participants bring their own surgical loupes and delicate dissection instruments. Please bring also your camera. Participants will be driven from Genval to the Liège University and back in a luxury coach.

Please note that it is very cold in the laboratory. Please dress accordingly for the dissections.

### **INTERNATIONAL FACULTY**

*Bahm J. (Aachen, Germany)*

*Birch R. (Middlesex, United Kingdom)*

*Brunelli G. (Brescia, Italy)*

*Carlier A. (Liège, Belgium)*

*Camut S. (Brussels, Belgium)*

*De Smet L. (Pellenberg, Belgium)*

*Hentz V.R. (San Francisco, USA)*

*Hierner R. (Leuven, Belgium)*

*Hollevoet N. (Gent, Belgium)*

*Hoyen H. (Cleveland, USA)*

*Leclercq C. (Paris, France)*

*Leijnse J. (Louisville, USA)*

*Meyer A. (Brussels, Belgium)*

*Moermans J.P. (Brussels, Belgium)*

*Molenaers G. (Pellenberg,*

*Belgium)*

*Mouraux D. (Brussels, Belgium)*

*Oberlin Ch. (Paris, France)*

*Robert Ch. (Brussels, Belgium)*

*Schuind F. (Brussels, Belgium)*

*Van Holder C. (Meulebeke,*

*Belgium)*

*Vancabeke M. (Brussels, Belgium)*

*Welraeds D. (Brussels, Belgium)*

*Zyluk A. (Szczecin, Poland)*

## Daily Program at a Glance

	<b>March 17 (Thursday)</b>	<b>March 18 (Friday)</b>	<b>March 19 (Saturday)</b>
06.30	Transfer Genval-Liège		
07.30		Registration – Coffee and Croissants	
08.00		An Introduction to the Symposium (1)	Restoration of Elbow, Wrist and Hand Function (1)
08.55	Course, Session A		
10.00		Coffee-Break	Coffee-Break
10.20		An Introduction to the Symposium (2)	Restoration of Elbow, Wrist and Hand Function (2)
10.45	Coffee-Break		
11.00	Course, Session B		
11.50		Obstetric Brachial Plexus Palsy	
12.35			Lunch
13.00	Box Lunch		
13.10		Lunch	
13.30	Course, Session C		Upper Extremity Spasticity/Tetraplegia
14.30		Restoration of Shoulder Function (1)	
14.55			Procedure that we don't do anymore and why
15.30	Coffee-Break		
15.45	Course, Session D		
16.10		Coffee-Break	Impaired Motion of the Upper Limb
16.15			General Conclusions
16.30		Restoration of Shoulder Function (2)	
16.45			Health Break
17.45			
17.50		Round Table and Case Presentations : Reconstructive Surgery of the Shoulder and Obstetric Brachial Plexus Palsy	
18.00			Social Program
18.30	Change	Cocktail in the Château	
18.45	Transfer Liège-Genval		
19.00		Free evening	
20.15	Free evening		

## Program

### Wednesday, March 16<sup>th</sup>, 2005

16.00-19.30 Course and congress registration

### Thursday, March 17<sup>th</sup>, 2005

06.30 Transfer by luxury coach Genval-Liège

#### Presymposium Hands-On-Course on Tendon Transfers - March 17, 2005 Faculty of Medicine of the University of Liège (Pr. A. Carlier), Liège, Belgium

08.45 Change and Preparation to Dissections

##### Hands-on Course, Session A

08.55 **Welcome Address** – A. Carlier, F. Schuind  
(Liège, Brussels, Belgium)

09.00 Demonstration 1  
**Huber's ADM Transfer**  
P. Loréa, C. Van Holder (Strasbourg, France  
and Waregem, Belgium)

09.20 Dissection  
**Huber's ADM Transfer**

09.40 Demonstration 2  
**Tendon Transfers for Low Ulnar Nerve  
Palsy**  
A. Zyluk, C. Oberlin (Szczecin, Poland and  
Paris, France)

10.00 Dissection  
**Tendon Transfers for Low Ulnar Nerve  
Palsy**

10.20 Demonstration 3  
**Tendon Transfers for Radial/Posterior  
Interosseous Nerve Palsy and Median Nerve  
Palsy**  
C. Leclercq, J. Bahm, J.P. Moermans (Paris,  
France, Aachen, Germany and Brussels,  
Belgium)

10.45 Coffee-Break

##### Hands-on Course, Session B

11.00 Demonstration 4  
**Interosseus Pulley**  
J.N.A.L. Leijnse (Louisville, Kentucky, USA)

11.20 Dissection  
**Interosseous Pulley**

11.40 Demonstration 5  
**Hyponeurotisation in Spasticity**  
G. Brunelli (Brescia, Italy)

12.00 Dissection  
**Hyponeurotisation in Spasticity**

12.20 Demonstration 6  
**Modified Steindler's Procedure**  
G. Brunelli (Brescia, Italy)

12.40 **Free dissections**

13.00 Box Lunch

##### Hands-on Course, Session C

13.30 Demonstration 7  
**EPL Reconstruction by EIP Transfer**  
A. Zyluk (Szczecin, Poland)

13.50 Demonstration 8  
**Parkes Tenodesis for Ulnar Nerve Palsy**  
A. Zyluk (Szczecin, Poland)

14.10 Demonstration 9  
**Biceps to FDP Transfer for C8Th1 Palsy**  
C. Oberlin (Paris, France)

14.30 Dissections  
**Biceps to FDP Transfer**

14.50 Demonstration 10  
**Latissimus Dorsi Transfer for Elbow Flexion  
Reanimation**  
R. Hierner (Leuven, Belgium)

15.10 Demonstration 11  
**Anatomy of Deltoid**  
J.N.A.L. Leijnse (Louisville, Kentucky, USA)

15.30 Coffee-Break

##### Hands-on Course, Session D

15.45 Demonstration 12  
**Tendon Transfers around the Humeral Head**  
J. Bahm (Aachen, Germany)

16.05 Demonstration 13  
**Key-Pinch Restoration in Tetraplegia**  
C. Leclercq, V. Hentz (Paris, France and San  
Francisco, California, USA)

16.25 Dissections  
**Key-Pinch Restoration**

16.45 Demonstration 14  
**Zancolli's Intrinsic Substitution Procedure**  
N. Hollevoet, V. Hentz (Gent, Belgium and San  
Francisco, California, USA)

17.05 Dissections  
**Zancolli's Procedure**

17.25 Demonstration 15  
**Tetraplegia Extension Elbow Transfers**  
H. Hoyen, D. Welraeds (Cleveland, Ohio, USA  
and Brussels, Belgium)

17.45 **Free dissections**

18.30 Change

18.45 Return to Genval by luxury coach

20.15 Free evening

## Friday, March 18, 2005

07.30-10.0	Registration – Coffee and Croissants	10.20-11.40	<b>Session 2 : An Introduction to the Symposium (2)</b> (Moderators : J. Bahm, Ch. Oberlin)	12.45	<b>Difficulties surrounding Restoration of Hand Function by Musculo-Tendinous Transfers</b> R. Birch (Stanmore, United Kingdom)
08.00-09.50	<b>Session 1 : An Introduction to the Symposium (1)</b> (Moderators : F. Schuind, V. Hentz)	10.20	<b>Tendon Transfers and Electrical Stimulation</b> H. Hoyen, M. Keith (Cleveland, Ohio, USA)	13.00	<b>Discussion</b>
08.00	<b>Opening Address</b> F. Schuind (Brussels, Belgium)	10.40	<b>Discussion</b>	13.10	Lunch and visit of the Commercial Exhibition
08.10	<b>Considerations on Muscle Morphology in Surgery</b> J.N.A.L. Leijnse (Louisville, Kentucky, USA)	10.50	<b>Results of Muscle/Tendon Transfers in PostTraumatic Brachial Plexus Lesions of the Adult</b> R. Hierner, E. van de Kerkhove (Leuven, Belgium)	14.30-16.10	<b>Session 4 : Restoration of Shoulder Function (1)</b> (Moderators : R. Birch, G. Herzberg)
08.30	<b>Muscle Coactivation after Severe Proximal Injury</b> J. Bahm (Aachen, Germany)	11.10	<b>Discussion</b>	14.30	<b>Morphology of the Deltoid Muscle in Reconstructive Surgery – Tendons of Origin, Tendons of Insertion and Compartment Structure</b> J.N.A.L. Leijnse, S.H. Han, T. Ozyurekoglul, Y.H. Kwon (Louisville, Kentucky, USA)
08.40	<b>Discussion</b>	11.20	<b>Brain Plasticity under Botox Treatment</b> G. Molenaers (Leuven, Belgium)	14.45	<b>Discussion</b>
08.50	<b>Biomechanical Research on the Behavior of Transferred Muscles</b> V.R. Hentz, W.P. Murray, L. Johanson, N. Smaby (San Francisco, California, USA)	11.40	<b>Discussion</b>	14.55	<b>Muscle Transfers to Improve Shoulder Abduction : Techniques and Results</b> J. Bahm (Aachen, Germany)
09.10	<b>Setting Tension in Tendon Transfers</b> V.R. Hentz, W.P. Murray, L. Johanson, N. Smaby (San Francisco, California, USA)	11.50-13.10	<b>Session 3 : Obstetric Brachial Plexus Palsy</b> (Moderators : G. Brunelli, L. De Smet)	15.10	<b>Reconstruction of the Paralytic Deltoid with a Bipolar Transfer of the Latissimus Dorsi Muscle</b> L. De Smet, P. Debeer, I. Degreef (Leuven-Pellenberg, Belgium)
09.20	<b>Discussion</b>	11.50	<b>The Problem of Shoulder Deformity</b> R. Birch (Stanmore, United Kingdom)	15.25	<b>Modelization of Latissimus Dorsi Transfer to the Humeral Head</b> G. Herzberg, O. Schoierer, E. Berthonnaud, J. Dimnet (Lyon, France)
09.30	<b>Tendon Transfers to Reanimate the Hand in Low (C8Th1) Brachial Plexus Lesions</b> C. Oberlin (Paris, France)	12.05	<b>Rotational Imbalance of the Gleno-Humeral Joint. Multifactorial Approach and Surgical Strategy</b> J. Bahm (Aachen, Germany)	15.40	<b>Discussion</b>
09.50	<b>Discussion</b>	12.20	<b>Discussion</b>		
10.00	Coffee-break and Visit of the Commercial Exhibition	12.30	<b>Current Tendon and Muscle Transfers in Obstetric Plexus Palsy</b> J. Bahm (Aachen, Germany)		

15.50 **Results of Shoulder Arthrodesis**  
B. Baillon, M. Vancabeke, J. Panda,  
F. Schuind, F. Burny (Brussels,  
Belgium)

16.05 **Discussion**

16.10 Coffee-Break and Visit of the  
Commercial Exhibition

16.30-17.50 **Session 5 : Restoration of Shoulder  
Function (2)**  
(Moderators : D. Welraeds, G.  
Brunelli)

16.30 **Reanimation of the  
PseudoParalytic Shoulder with a  
Latissimus Dorsi Transfer**  
P. Debeer, I. Degreef, L. De Smet  
(Leuven-Pellenberg, Belgium)

16.45 **Latissimus Dorsi Transfer to Treat  
Massive Cuff Tears : Clinical  
Experience and Technical  
Considerations**  
G. Herzberg, O. Schoierer, E.  
Berthonnaud, J. Dimnet (Lyon,  
France)

17.00 **Discussion**

17.10 **Scapular Winging from Long  
Thoracic Palsy**  
H. Hoyer, M. Keith (Cleveland,  
Ohio, USA)

17.25 **Discussion**

17.30 **Treatment of Postradiotherapy  
Plexitis**  
C. Becker (Brussels, Belgium)

17.45 **Discussion**

17.50-18.30 **Session 6 : Round Table and Case  
Presentations : Reconstructive  
Surgery of the Shoulder and  
Obstetric Brachial Plexus Palsy**  
(Moderators : J. Bahm, V.R. Hentz)

18.30 Cocktail in the Château

19.00 Free Evening

**Saturday, March 19, 2005**

08.00-10.00 **Session 7 : Restoration of Elbow,  
Wrist and Hand Function (1)**  
(Moderators : P. Loréa, J.P.  
Moermans)

08.00 **Functional Results of Doi's  
Transfers in Brachial Palsies :  
Personal Experience**  
A. Carlier, J.P. Deleuze, C.  
Lambermont, D. Nardella, C.  
Romsmans (Liège, Belgium)

08.15 **Discussion**

08.20 **Personal Modifications of the  
Steindler Operation**  
G. Brunelli (Brescia, Italy)

08.35 **Discussion**

08.40 **Tendon Transfers for Associated  
Palsies of the Median and Ulnar  
Nerves**  
G. Brunelli (Brescia, Italy)

08.55 **Discussion**

09.00 **Tendon Transfers for Radial Nerve  
Palsy**  
J.P. Moermans (Brussels, Belgium)

09.15 **Wrist Arthrodesis to Restore the  
Paralyzed Upper Extremity -  
Contradiction or Benefit ?**  
K. Kalb, A. Gohritz, Th. Gohla, Th.  
Pillukat, I. Mehling, U. Lanz (Bad  
Neustadt, Germany)

09.30 **Discussion**

09.40 **Nerve Transfer, Interosseous Anterior  
to Motor Branch of the Ulnar Nerve :  
an Alternative Approach for Low Ulnar  
Nerve Palsy**  
L. De Smet (Leuven-Pellenberg, Belgium)

09.55 **Discussion**

10.00 Coffee-Break and Visit of the Commercial  
Exhibition

10.20-12.35 **Session 8 : Restoration of Elbow, Wrist  
and Hand Function (2)**  
(Moderators : R. Hierner, A. Zyluk)

10.20 **Pollicization Positioning by Tendons  
and Muscles Balance in Thumb  
Hypoplasia**  
P. Loréa, G. Foucher (Strasbourg, France)

10.35 **Results of Huber's Abductor Digiti  
Minimi Transfer**  
C. Van Holder, H. Giele, A. Gilbert  
(Waregem, Belgium, Oxford, United  
Kingdom, and Paris, France)

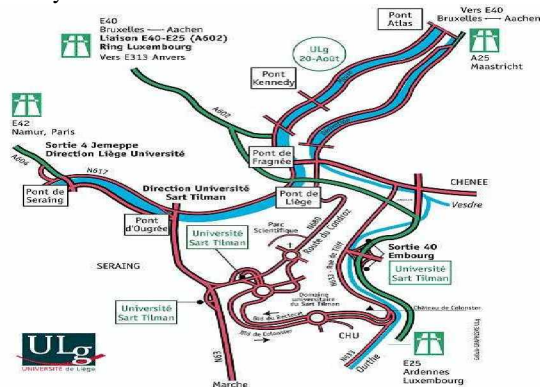
10.50 **Discussion**

11.00 **Extensor Pollicis Longus Entrapment in  
a Paediatric Distal Radius Fracture**  
W. El-Kazzi, F. Schuind (Brussels,  
Belgium)

11.10 **Discussion**

11.15	<b>The Pulley of the Wing Tendon of the Interosseus at the MCP</b> J.N.A.L. Leijnse, T. Ozyurekoglul, S.H. Han, H. Hara, F. Schuind (Louisville, Kentucky, USA, and Brussels, Belgium)	14.10	<b>Surgery to Improve Function in Tetraplegia</b> N. Hollevoet, A. Vanden Berghe, A. Viaene, W. Vanhove, M. Van Laere, G. Vanderstraeten, R. Verdonk (Gent, Belgium)	16.35	<b>Summary and Conclusions</b> F. Schuind (Brussels, Belgium)
11.30	<b>Discussion</b>	14.25	<b>Discussion</b>	16.45	<b>Health Break (Sports or Access to the Center of Fitness)</b>
11.35	<b>Impaired Motion of the Upper Limb in Complex Regional Pain Syndrome Type I</b> A. Zyluk, B. Zyluk, P. Pulchalski, J. Strychar (Szczecin, Poland)	14.35	<b>Tendon Transfers in Paralyzed Upper Limbs of Tetraplegics</b> D. Welraeds, A.A. Ismail, A. Parent (Brussels, Belgium)	18.00	<b>Social Program : optional</b>
11.50	<b>Discussion</b>	14.50	<b>Discussion</b>	<b>Congress Information</b>	
11.55	<b>Orthotic Treatment of Tremor</b> S. Camut, M. Manto (Brussels, Belgium)	14.55- 15.45	<b>Session 10 : Procedures that we don't do anymore and why</b> (Moderators : G. Brunelli, V.R. Hentz)	<b>VENUE</b> 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 : <a href="mailto:seminars.cdl@martins-hotels.com">seminars.cdl@martins-hotels.com</a>	
12.10	<b>Discussion</b>	14.55	<b>Procedures I have Modified</b> V.R. Hentz (San Francisco, California, USA)	<b>LANGUAGE</b> English	
12.15	<b>Intraoperative Injection of Botulinum Toxin-A (Botox®) for Prevention of Post-Traumatic Elbow Stiffness</b> L. Chen, P. Kim, T. Protopsaltis, J. Lee, M.P. Rosenwasser (New York, USA)	15.05	<b>Discussion</b>	<b>INFORMATION FOR PRESENTERS</b> The allocated time of presentation should be strictly respected (15 min. for most free papers).	
12.30	<b>Discussion</b>	15.15	<b>Neurotization of the Axillary Nerve</b> R. Hierner (Leuven, Belgium)	<b>The standard presentation format is by computer. The audiovisual projection system in the meeting room will include a Personal Computer (PC) along with PowerPoint for Windows and a standard CD)-ROM drive. Request to use any equipment other than this must be arranged at the presenter's expense.</b>	
12.35	<b>Lunch and Visit of the Commercial Exhibition</b>	15.25	<b>Discussion</b>	Each presenter should check with the technician 20 min. before the session, and introduce himself to the moderators of the session. The technician will be available in the meeting room from 07.00 on both congress days.	
13.30-14.55	<b>Session 9 : Upper Extremity Spasticity / Tetraplegia</b> (Moderators : H.A. Hoyen, A. Carlier)	15.35	<b>Tenotomies of Active Muscles</b> J. Bahm (Aachen, Germany)	<b>ADVANCED COURSE OF UPPER EXTREMITY TENDON TRANSFERS (March 17, 2005)</b> The course is organized by A. Carlier and F. Schuind, in the Department of Anatomy of the Université de Liège (Institut d'Anatomie Auguste Swaen, rue des Pitteurs 20, B-4020 Liège. Tel + 32 4 366 51 91).	
13.30	<b>Hyponeurotization (Selective Denervation) in Spasticity</b> G. Brunelli (Brescia, Italy)	15.45	<b>Discussion</b>		
13.45	<b>Discussion</b>	15.55	<b>Surgical Treatment of PostRadiation Plexitis</b> R. Hierner (Leuven, Belgium)		
13.50	<b>Update on Surgical Reconstruction in Tetraplegic Patients</b> V.R. Hentz, C. Leclercq (San Francisco, California, USA, and Paris, France)	16.05	<b>Discussion</b>		
		16.15-16.45	<b>Session 11 : Impaired Motion of the Upper Limb – General Conclusions</b> (Moderators : F. Schuind, J. Bahm)		
		16.15	<b>Ten Questions to the Floor and the Faculty – Case Presentations</b>		

Transport from and to Genval is arranged. Note that the bus will leave the Château du Lac of Genval at 06.30 AM exactly.



### ACCOMMODATION

#### Château du Lac (5 stars hotel) – meeting place

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 (March 17, 2005)  
Single 170 €nights with breakfast (March 18-19-20, 2005)

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@martins-hotels.com](mailto:seminars.cdl@martins-hotels.com)

When contacting the hotel, please indicate that you are attending the “Impaired Motion Symposium” to receive the reduced rate for the dates March 16 through March 20.

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 120 €night with breakfast (March 16-17, 2005)  
Single 90 €night with breakfast (March 18-19-20, 2005)

Address : Le Lido  
20, rue de Limalbart, B-1332 Rixensart (Brussels), Belgium  
Tel + 32 2 634 34 34 – Fax +32 2 634 34 44  
E-mail : [lélido@martins-hotels.com](mailto:lélido@martins-hotels.com)

### CONTINUING MEDICAL EDUCATION CREDIT

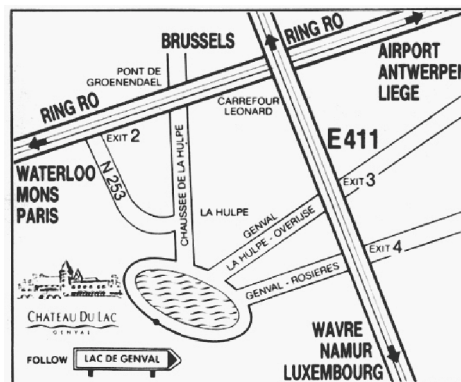
Belgian Accreditation Council, 120 points (4548.0002, accreditation type 4, 120 U.F.C./N.E.).

### TRAVEL INFORMATION

The Brussels International Airport has flight connections from many major cities in Europe and overseas. Coach transport from and to the airport is organized on March 16, March 17, and March 20. One of us will meet you 15 min prior to the departure of the bus, at the Airport meeting point (level arrivals) and at the railway station meeting point (gare du Midi).

Timetable :

	March 16	March 17	March 20
Zaventem Airport	15.30	15.30	
Gare du Midi	16.15	16.15	
Genval	17.00	17.00	09.00
Zaventem			10.00

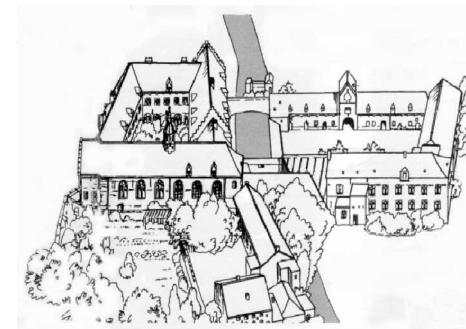


Genval can also be reached by car, by taxi (about 60 € from the airport). Although there is a railway station in Genval, we do not recommend the train as there are no taxis’ at the station, about 5 km from the hotel.

### Social Program (March 19, 2005) – Hospital Our Lady with the Rose, Lessines

Originally the Hospital Our Lady with the Rose was in 1242 a « Hôtel-Dieu », founded by Alix de Rosoit, the widow of Lord Arnould IV of Oudenaarde, great bailiff of Flanders and lord of Oudenaarde and Lessines.

Since the closing in 1980 of the hospital, a Museum has been established, paying a tribute to the dual medical and spiritual vocation of the Hospital. The visitors will discover 15 rooms such as the Strangers’ room, the Infirmary, the ecclesiastic apartments, the Dispensary, sickrooms, the Chapel and the Refectory. The collections are made up of stunning art objects, medical apparatuses, pharmaceutical paraphernalia, gothic furnishings, priceless paintings, pewter pieces, chinaware, books, goldsmiths’ ware and records. All objets on display belong to the history of the hospital.



The Museum is also especially inviting because of its surroundings and the beauty of its buildings. Along the Dendre, at the historical center of the town, the hospital also includes farm buildings and enclosed gardens.

A nice banquet is then organized close to the museum. Transport from Genval and return has been arranged in a luxury coach. Please join us !



## REGISTRATION FEES

Before Dec. 1, 2004	430 €(1)
After Dec. 1, 2004	450 €(1)
Resident/Student/Physiotherapist/Nurse	300 €(2)
Presymposium course on Upper Extremity Tendon Transfer	300 €(3)
Optional : touristic visit of the Hospital Our Lady with the Rose at Lessines and Banquet (March 19, 2005)	80 €(4)

- (1) Fees include meeting attendance, book of abstracts, lunches, welcome reception on March 18, and transport by coach from and to the airport on March 16, March 17 and March 20. Not included : hotel accommodation, meals except 2 lunches, access to sport 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. A 3 % commission will be added to all payments made by credit card. Invoices will be expressed in EURO. 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. The symposium is organized by the 'Groupe pour l'Etude du Membre Supérieur', ASBL, Brussels.
- (2) Please include a certificate signed by head of department.
- (3) Fees include participation in the one-day course, CD-rom, disposal of basic instruments and scrub, box-lunch at noon, and transport by luxury coach from Genval-Liège and return. The course is organized in the Faculty of Medicine of the University of Liège (Pr A. Carlier).
- (4) Included : coach transport Genval-Lessines, touristic visit of the Hospital Our Lady with the Rose at Lessines, and dinner in a typical Belgian restaurant.

### Bank transfer :

Account holder « GEMS »  
Account number BE51 0012 3439 9162 (international)  
or 001-2343991-62 (Belgium)

with Fortis Bank, Route de Lennik 808, B-1070 Brussels,  
Belgium  
BIC or SWIFT code : GEBABEBB  
Kindly instruct your bank that all charges are at your  
expenses, and indicate name and address on your  
payment order form.

### 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, 2004. A 50 % refund will be made for  
cancellations received by January 15, 2005. No refunds  
will be made thereafter.

### REGISTRATION DESK

The registration desk will be open at the Château du Lac  
during the following hours :

March 16 : 16.00-19.30  
March 17 : 16.00-19.30  
March 18 : 07.30-17.00  
March 19 : 07.30-17.00

### CERTIFICATE OF ATTENDANCE

Available at the registration desk. Upon request, a letter  
of invitation will be sent.

### WEATHER

The weather should be pleasant (early spring). Rain is  
always possible !

### CONGRESS SECRETARIAT

Mrs Th. Nguyen  
Dept. of Orthopaedics, Erasme University Hospital  
Route de Lennik 808, B-1070 Brussels  
Tel. +32 2 555 68 44 – 555 36 45, Fax + 32 2 555 83 60  
E-mail : Hand.congress@ulb.ac.be

## REGISTRATION FORM

To be filled in and returned as soon as possible

Name.....

First name .....

Name.....

Specialty .....

Title.....

Institution.....

Address .....

City..... Country ..... Zip.....

Phone ..... Fax .....

Email.....

Arrival date ..... Departure date .....

Special requests (diets, etc.).....

Please fill in below as appropriate

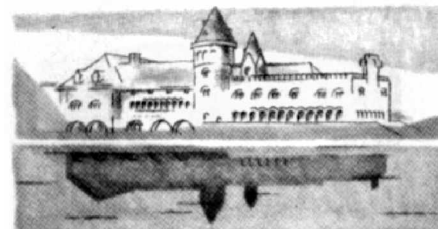
- I will participate in the *Impaired Motion of the Upper Limb Symposium* (March 18-19, 2005).
- I would also like to participate in the Presymposium Hands-on Course on Upper Extremity Tendon Transfers – March 17, 2005; the number of participants is limited; if some participants cannot be accepted, the fees will be reimbursed at not charge.
- I would like to attend the banquet and touristic visit (Hospital Our Lady with the Rose at Lessines), March 19, 2005.
- My registration fees are paid as follows :
  - Enclosed check
  - Money order to Belgian account  
BE51 001-2343991-62 (International)  
001-2343991-62 (Belgium)
  - Credit card (Euro/Master, Visa)  
Card type : .....
  - Card account number : .....
  - Cardholder's name : .....
  - Expiration date (mo/yr.) : .....

.....  
SIGNATURE

.....  
Date

Returned this documnet (registration form) as soon as possible to:

Prof. F. SCHUIND, MD, Ph D  
Department of Orthopaedic Surgery  
Erasme University Hospital  
Université libre de Bruxelles  
Route de Lennik 808  
B-1070 BRUSSELS  
BELGIUM



CHATEAU DU LAC  
GENVAL