AIMS AND FORMAT

In the last decades, much progress has been achieved in the surgical treatment of various traumatic, neoplastic, neurological and degenerative disorders of the upper limb. However, the probable benefits of these operations should be evaluated, taking into account the natural history of each disorder. It is also essential to determine which procedure provides the best and most reliable results. To answer these questions, our clinical studies should be prospective and randomized, and an objective scientific assessment of the short-term and long-term results is essential. Functional evaluation of the upper limb is also an important issue in rehabilitation, for example in athletes. In neurological conditions, for example spinal cord injuries, it is essential to determine the possibilities of functional restoration and the indications of palliative or orthotic treatment. Kinematic evaluation is also important for quantifying exposure to physical stress in repetitive manual work or in sports.

Traditional clinical evaluation includes subjective evaluation of pain, return to social, professional and recreational activities, patient satisfaction, and objective evaluation of stability, trophicity, and measurement of range of motion, strength, and sensibility. The clinical examination may be refined by evaluating the performance of a set of tasks defined by the clinician or by the patient himself, allowing the calculation of a dexterity score. The collection of these clinical data and the calculation of the various scores is now facilitated by the use of dedicated computerized programs. The choice of evaluation score may provide a pessimistic or optimistic appreciation of the result, depending on the chosen criteria. In addition to this clinical examination, and to imaging or neurophysiological evaluations, electrogoniometers, electromechanical or optic trackers, video systems, straining-gauge equipped-pinches and grasp-meters, isokinetic and isometric dynamometers and work simulators are now available for the objective assessment of our patients, but are not widely used. The data provided by these devices could however be extremely helpful, especially in clinical research to evaluate with great sensitivity and reliability kinematics, strength, performance and endurance deficits. In addition, the information may be used for simulation of motion, for evaluation of ergonomic posture, or for fundamental biomechanical research. In contrast to these sophisticated evaluation tools, many clinicians insist now on the outcome evaluation based on questionnaires, assessing the general quality of life and the possibility for the patient to perform the various tasks of daily living.

The primary goals of this symposium, gathering together in a first-class resort close to Brussels anatomists, engineers, orthopedic surgeons, plastic surgeons, hand surgeons, physiotherapists and medicoegal experts, are to analyze on a consensual basis the various techniques of objective evaluation of the upper extremity, from the shoulder to the hand, and to define the best methods of outcome assessment.

SPECIFIC AIMS

• To summarize the current state of knowledge on the objective assessment of the upper extremity, including data interpretation on the basis of normal data bases, of hand dominance, positioning during testing, and of measurements’ reproducibility;
• To evaluate the costs and assessment times of the various methods;
• To discuss the influence of patients lost to follow-up on the overall results of a specific procedure;
• To formulate on these bases recommendations to the medical community with respect to the outcome measure on after shoulder, elbow, wrist and hand surgery and/or during rehabilitation, including for non-operative affections;
• To establish the most appropriate methods for objective medicoegal assessment of posttraumatic upper limb deficits;
• To review new evaluation devices and softwares;
• To discuss unsolved problems and potential solutions based on current clinical and biomechanical knowledge;
• To explore future directions of investigations.

INTERNATIONAL FACULTY

P. C. Amadio, Rochester, MN, USA
Y. Andrianne, Brussels, Belgium
E. Brassinne, Brussels, Belgium
F. Burny, Brussels, Belgium
A. Carlier, Liège, Belgium
L. De Smet, Leuven, Belgium
P. M. Dugailly, Brussels, Belgium
V. Feipel, Brussels, Belgium
P. Hoffmeyer, Geneva, Switzerland
M. Hoogmaerten, Leuven, Belgium
A. I. Kapandji, Longjumeau, France
L. Kinnen, Brussels, Belgium
J. P. Moermans, Brussels, Belgium
D. Mouraux, Brussels, Belgium
Ph. Putz, Brussels, Belgium
P. Rémy, Brussels, Belgium
Ch. Robert, Brussels, Belgium
M. Rooze, Brussels, Belgium
P. Salvia, Brussels, Belgium
F. Schuind, Brussels, Belgium
T. Smits, Brussels, Belgium
D. Stoffelen, Lincolnshire, UK
J. L. Thonnard, Brussels, Belgium
J. Cl. Wautrecht, Brussels, Belgium

Meeting place
Château du Lac
Avenue du Lac, B-1332 Genval, Belgium
Tél. +32 2 655 71 11 - Fax +32 2 655 74 44
E-mail: seminars.cdI@martins-hotels.com

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e-mail: fschuind@ulb.ac.be
http://www.ulb.ac.be/assoc/chorus/orthogenicval/
### Daily Program at a Glance

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<tr>
<th>April 19 (Thursday)</th>
<th>April 20 (Friday)</th>
<th>April 21 (Saturday)</th>
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<tr>
<td>08.00</td>
<td>Registration</td>
<td>Clinical Examination and Use of Questionnaires to Assess Upper Extremity Functional Outcome (1)</td>
</tr>
<tr>
<td>09.00</td>
<td>An Introduction to the Objective Assessment of Hand/Upper Extremity Function and Outcome</td>
<td></td>
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<tr>
<td>09.25</td>
<td>Coffee break</td>
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<tr>
<td>09.45</td>
<td>Clinical Examination and Use of Questionnaires to Assess Upper Extremity Functional Outcome (2)</td>
<td></td>
</tr>
<tr>
<td>10.55</td>
<td>Coffee break</td>
<td></td>
</tr>
<tr>
<td>11.00</td>
<td>Clinical Applications (1)</td>
<td></td>
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<tr>
<td>11.20</td>
<td>Kinematic Evaluation of the Upper Extremity</td>
<td>Lunch</td>
</tr>
<tr>
<td>11.55</td>
<td>Lunch and health break</td>
<td>Clinical Applications (2)</td>
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<tr>
<td>12.40</td>
<td>Upper Extremity Strength Evaluation (1)</td>
<td>Coffee break</td>
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<tr>
<td>13.00</td>
<td>Coffee break</td>
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<tr>
<td>13.30</td>
<td>Upper Extremity Strength Evaluation (2)</td>
<td>Medicolegal Assessment</td>
</tr>
<tr>
<td>15.55</td>
<td>Upper Extremity Strength Evaluation (2)</td>
<td>Registration</td>
</tr>
<tr>
<td>16.00</td>
<td>Objective Assessment of Hand/Upper Extremity Function and Outcome General Conclusions</td>
<td></td>
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<tr>
<td>16.05</td>
<td>Objective Assessment of Bone Healing and Vascular Status</td>
<td>Health break</td>
</tr>
<tr>
<td>17.00</td>
<td>The Hand, Seeing is Believing</td>
<td>Social program</td>
</tr>
<tr>
<td>17.40</td>
<td>Cocktail in the Château</td>
<td>Free Evening</td>
</tr>
<tr>
<td>18.00</td>
<td>Social program</td>
<td>Banquet (optional)</td>
</tr>
<tr>
<td>19.30</td>
<td>Free Evening</td>
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<td>20.00</td>
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</tbody>
</table>

### Program

#### Thursday, April 19, 2001

**16.00-19.30** Registration

#### Friday, April 20, 2001

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
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<tbody>
<tr>
<td>08.00</td>
<td>Registration - Coffee and croissants</td>
</tr>
<tr>
<td>09.00-11.00</td>
<td><strong>Session 1 : An Introduction to the Objective Assessment of Hand/Upper Extremity Function and Outcome</strong>&lt;br&gt;(Moderators : F. Burny, J. L. Thonnard)</td>
</tr>
<tr>
<td>09.00</td>
<td>Opening Address</td>
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<tr>
<td>09.10</td>
<td>Value of Constant Score in Subacromial Impingement&lt;br&gt;Ph. Tollet, L. Fabeck, R. Baillon, M. Gris, F. Schuind (Brussels, Belgium)</td>
</tr>
<tr>
<td>09.20</td>
<td>Practical Use and Limitations of Clinical Scores : Example, Wrist, Evaluation after Treatment of Kienböck's Disease&lt;br&gt;S. Eslami, P. Ledoux, F. Schuind (Charleroi, Brussels, Belgium)</td>
</tr>
<tr>
<td>09.40</td>
<td>How to Measure Impairment of the Upper Limb ?&lt;br&gt;J. L. Thonnard (Brussels, Belgium)</td>
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<tr>
<td>10.00</td>
<td>Functional Assessment of the Impaired Hand&lt;br&gt;J.P. Moermans (Brussels, Belgium)</td>
</tr>
<tr>
<td>10.20</td>
<td>Pejorative Effects of Repetitive Technical Examinations on Hand and Wrist Assessment&lt;br&gt;L. Kinnen (Brussels, Belgium)</td>
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<tr>
<td>10.40</td>
<td>Discussion</td>
</tr>
<tr>
<td>11.00</td>
<td>Coffee break and visit of the Commercial Exhibition</td>
</tr>
<tr>
<td>11.20-12.40</td>
<td><strong>Session 2 : Kinematic Evaluation of the Upper Extremity</strong>&lt;br&gt;(Moderators : M. Rooze, A. Carlier)</td>
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<tr>
<td>12.00</td>
<td>Lunch</td>
</tr>
<tr>
<td>12.50</td>
<td>Pseudo Dynamic Investigation of the Wrist using 3D-CT Reconstruction. Clinical Applications and Relation between Kinematics and Morphology&lt;br&gt;V. Feipel, M. Dourdoufis, M. Rooze (Brussels, Belgium)</td>
</tr>
<tr>
<td>12.25</td>
<td>Evaluation of the Functional Range of Motion of the Wrist&lt;br&gt;D. Nelson (San Francisco, CA, USA)</td>
</tr>
<tr>
<td>12.40</td>
<td>Lunch, health break and visit of the Commercial Exhibition</td>
</tr>
<tr>
<td>14.30-15.35</td>
<td><strong>Session 3 : Upper Extremity Strength Evaluation (1)</strong>&lt;br&gt;(Moderators : D. Mouraux, Y. Andrianne)</td>
</tr>
<tr>
<td>14.30</td>
<td>Isokinetic and Isometric Dynamometric Evaluation of the Upper Extremity&lt;br&gt;E. Brassinne, P. Rémy, Y. Andrianne (Brussels, Belgium)</td>
</tr>
<tr>
<td>14.50</td>
<td>Discussion</td>
</tr>
<tr>
<td>14.55</td>
<td>Isokinetic Strength Testing after Neer Repair for Shoulder Dislocation&lt;br&gt;N. Riand, P. Clayson, J. L. Ziltener, P. Hoffmeyer (Geneva, Switzerland)</td>
</tr>
<tr>
<td>15.15</td>
<td>Discussion</td>
</tr>
<tr>
<td>15.20</td>
<td>Grip Force in the Objectivation and Outcome of “Tennis Elbow”&lt;br&gt;L. De Smet (Leuven, Belgium)</td>
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<tr>
<td>15.30</td>
<td>Discussion</td>
</tr>
<tr>
<td>15.35-15.55</td>
<td>Coffee break</td>
</tr>
<tr>
<td>15.55-16.50</td>
<td><strong>Session 4 : Upper Extremity Strength Evaluation (2)</strong>&lt;br&gt;(Moderators : E. Brassinne, Ph. Putz)</td>
</tr>
<tr>
<td>15.55</td>
<td>Use of the Dynamometer for Assessment of Hand Function&lt;br&gt;A. Carlier (Liège, Belgium)</td>
</tr>
<tr>
<td>16.00-19.30</td>
<td>Registration</td>
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</tbody>
</table>
16.15  Discussion
16.20  Is there a Correlation between Mobility of the Thumb and Mechanical Hand Function
       L. De Smet (Leuven, Belgium)
16.30  Discussion
16.35  Measurement of Finger Stiffness in Algodystrophy
       J. Field (Gloucestershire, United Kingdom)
16.45  Discussion
16.50-17.40  Session 5 : Objective Assessment of Bone Healing and Vascular Status
           (Moderators : M. Hoogmaertens, F. Schuind)
16.50  Biomechanical Evaluation of Fracture Healing using Instrumented External Fixation
       F. Burny, M. Donkerwolcke, F. Moulart (Brussels, Belgium)  09.45
17.10  Discussion
17.15  Occupational Vascular Disorders of the Upper Extremities
       J. Cl. Wautrecht (Brussels, Belgium)  10.00
17.35  Discussion
17.40-17.55  Session 6 : The Hand, Seeing is Believing
            (Moderators : L. Kinnen, Ch. Robert)
17.40  The Hand, Seeing is Believing
       G. M. van Meerwijk (Amsterdam, The Netherlands)  10.10
17.50  Discussion
18.00-19.30  Cocktail in the Château
19.30  Free evening

Saturday, April 21, 2001
08.00-09.25  Session 7 : Clinical Examination and Use of Questionnaires to Assess Upper Extremity Functional Outcome (1)
           (Moderators : A. I. Kapandji, J. P. Moemans)
08.00  Clinical Evaluation of the Upper Limb Joints
       A. I. Kapandji (Longjumeau, France)  10.05
08.20  Discussion
08.25  Use and Abuse of Questionnaires to Assess Functional Outcomes
       P. C. Amadio (Rochester, MN, USA)  11.05
10.00  Discussion
10.05  Session 8 : Clinical Examination and Use of Questionnaires to Assess Upper Extremity Functional Outcome (2)
       (Moderators : P. C. Amadio, T. Smits)
10.10  Discussion
10.15  Evaluation of the Hand
       T. Smits, Ch. Robert, D. Mouraux (Brussels, Belgium)  13.50
10.35  Discussion
10.40  The Detection of Subtle Extensor Tendon Tethering after Injury to the Hand
       M. Kulkarni, S. B. Harris, D. Elliot (Broomfield, United Kingdom)  13.55
11.00  Discussion
11.05  Session 9 : Clinical Applications (1)
       (Moderators : P. Salvia, D. Stoffelen)
11.05  Discussion
11.10  Isokinetic Assessment of the Shoulder
       P.M. Dugailly, D. Mouraux, Ch. Robert (Brussels, Belgium)  14.40
11.20  Discussion
11.25  Do Bipolar Implants Provide Adequate Stability for Radial Head Arthroplasty?
       S. Pomianowski, B. F. Morrey, P. G. Neale, M. J. Park, S. W. O’Driscoll, K. N. An (Rochester, MN, USA)  14.10
11.35  Discussion
11.40  Isokinetic Evaluation of the Wrist and Elbow
       P. Rémy, E. Brassinne, P.M. Dugailly (Brussels, Belgium)  14.25
11.50  Discussion
11.55  Lunch and visit of the Commercial Exhibition
13.00-15.40  Session 10 : Clinical Applications (2)
            (Moderators : L. De Smet, V. Feipel)
13.00  Objective Functional Evaluation of Wrist Fractures
       D. Stoffelen (Lincolnshire, United Kingdom)  10.05
13.20  Discussion
13.25  Development of an Objective Wrist Function Assessment Instrument
       D. Nelson (San Francisco, CA, USA)  11.55
13.35  Discussion
13.40  Electrogoniometric and Radiological Evaluation of STT Arthrodesis
       P. Salvia, F. Schuind, V. Feipel, M. Rooze (Brussels, Belgium)  11.10
13.50  Discussion
13.55  Development of a Patient-Focused Wrist Outcome instrument
       A. Bialocerkowski, K. Grimmer, G. Bain (Adelaide, Australia)  11.30
14.05  Discussion
14.10  Value of Clinical Provocative Tests in Carpal Tunnel Syndrome
       L. De Smet (Leuven, Belgium)  14.25
14.25  Discussion
14.30  A New Model Instrument for Clinical Assessment after Nerve Repair
       B. Rosén, G. Lundborg (Malmö, Sweden)  14.35
14.40  The DASH : a Useful Assessment Method to Evaluate Functional Recovery Following Median and Ulnar Nerve Injuries
Congress Information

Venue
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

Language
English.

Information for Presenters
The allocated time of presentation should be strictly respected (10 min. for most free papers).

The standard presentation format is now by computer. The audiovisual projection system in the meeting room will include a Personal Computer (PC) along with PowerPoint 97 or 2000 for Windows and a standard CD-ROM drive. Single slide projection or overhead projection are also available, but not recommended. Request to use any equipment other than this must be arranged at the presenter's expense.

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.

Accommodation
At the quiet and beautiful 'Château du Lac', 15 km outside Brussels. Sports facilities (tennis, golf practice, swimming pool) will be available during leisure time.

Free access available at the 'John Harris Fitness Centre' for participants accommodated at the Château.

When contacting the hotel, please state that you are attending the "Upper Extremity Symposium" to receive the reduced rate for the dates April 19 through April 22.

Indicative rate : SINGLE 471 € – included : 3 nights bed and breakfast, Château du Lac or Manoir du Lac (same location), access to sports facilities.

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

Continuing Medical Education Credit
Belgian Accreditation Council, 120 points (4148.0019, accreditation type 2, 120 U.F.C./N.E.).
A certificate will be provided to interested participants.
Social Program

On April 20, the participants are invited to attend, after the scientific sessions, a traditional cocktail in the Château du Lac. On April 21, before the banquet, a visit of downtown Brussels is organized, in the Grand’Place quarter. The visit is followed by beer and gueuze in Toone estaminet, with a guided visit of the puppet museum and a traditional show. A fine banquet is then organized in a famous restaurant in downtown Brussels. Participants will be driven to Brussels and back to Genval (around 23.30) in a luxury coach. Please join us!

Upon request, paying excursion may be organized during the congress for accompanying persons.

Registration Fees

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<tr>
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<th>Notes</th>
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</thead>
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<tr>
<td>Before Dec. 1, 2000</td>
<td>360 €</td>
<td>(1) Fees include meeting attendance, book of abstracts, lunches, welcome reception on April 20, and transport by coach from and to the airport on April 19 and April 22. 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 net of all bank charges and commissions. A 4% commission will be added to all payments made by credit card. Invoices will be expressed in €. 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’Etuude du Membre Supérieur’, ASBL, Brussels.</td>
</tr>
<tr>
<td>After Dec. 1, 2000</td>
<td>400 €</td>
<td>(1)</td>
</tr>
<tr>
<td>Resident/Student/Physiotherapist/Nurse</td>
<td>180 €</td>
<td>(2) Please include a certificate signed by head of department.</td>
</tr>
</tbody>
</table>

Bank: CGER Erasme, 808 route de Lennik, B-1070 Brussels, Belgium on account 001-2343991-62 (GEMS).

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, 2000. A 50% refund will be made for cancellations received by January 15, 2001. No refunds will be made thereafter.

Registration Desk

The registration desk will be open at the Château du Lac during the following hours:
- April 19: 16.00-19.30
- April 20: 07.30-17.00
- April 21: 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 sunny with pleasant temperatures. Rain is always possible!

Congress Secretariat:

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Erasme University Hospital
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B-1070 Brussels
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