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, on a specific topic involving the hand and the upper limb. In 2002, the theme was Advances in Minimally Invasive Hand/Upper Extremity Surgery, involving over 100 participants from 13 different countries. 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.

The organizers invite you today to participate in the 11th symposium, on Advances in Anatomy and Clinical Examination of the Hand and Wrist. In the last decades, there has been remarkable progress in normal anatomy and variants. New knowledge has accumulated on functional anatomy and microanatomy of the hand and wrist. Fine dissections allow better understanding of the function of wrist extrinsic and intrinsic ligaments, or of the complex behavior of the extensor apparatus. The aponerotic systems of the hand are now well described, providing better comprehension of the types of contractures occurring in Dupuytren's disease and related conditions. Better knowledge of microarterial anatomy has enlarged our possibilities of soft-tissue reconstruction using island flaps or new techniques of bone revascularization by pedicle bone transfers. Progress has been made in muscle and nerve microanatomy, raising new fundamental hypotheses on human neuromuscular physiology. Studies of tendon vascular supply have led to progress in tendon suturing and grafting techniques. Individual variations and their surgical consequences are better appraised. Based on precise anatomical knowledge, clinical examination of the hand and wrist has also progressed, which is particularly important in these times of restriction of diagnostic imaging. Progress in anatomical and biomechanical knowledge is also important for better functional evaluation and rehabilitation of the hand and wrist.

The primary goal of this symposium is to summarize and discuss these new acquisitions in the knowledge of hand anatomy and related progress in clinical examination, biomechanics and surgical techniques.

Specific Aims

- To summarize the state of knowledge, including normal variants, of hand and wrist anatomy and clinical examination;
- To discuss the problems of teaching surgical anatomy and semiotics;
- To discuss new acquisitions in hand and wrist biomechanics, based on anatomical knowledge;
- To review new surgical techniques, and to determine the most appropriate methods for objective assessment of the results of these new techniques;
- To formulate on these bases recommendations for the medical community;
- To discuss unsolved problems and potential solutions based on current anatomical and biomechanical knowledge;
- To explore future directions of investigation.

Advanced Course of Hand and Wrist Anatomy

As an introduction to the symposium, an anatomic hands-on course will be organized on March 27 in the Department of Anatomy of the Medical School of the Université libre de Bruxelles. 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 hand (one specimen per participant). 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 university and back in a luxury coach.

International Faculty

Amadio P.C. (Rochester, MN, USA)
Barbier O. (Brussels, Belgium)
Brunelli F. (Paris, France)
Burny F. (Brussels, Belgium)
Carlier A. (Liège, Belgium)
De Smet L. (Pellenberg, Belgium)
Feipel V. (Brussels, Belgium)
Fontaine C. (Lille, France)
Garcia-Elias M. (Barcelona, Spain)
Hollevoet N. (Gent, Belgium)
Kapandji A.I. (Longjumeau, France)
Kauer J.M.G. (Nijmegen, The Netherlands)
Ledoux P. (Brussels, Belgium)
Leijnse J.N.A.L. (Brussels, Belgium)
Lorea P. (Strasbourg, France)
Moermans J.P. (Brussels, Belgium)
Restrepo J.L. (Nancy, France)
Rooze M. (Brussels, Belgium)
Salvia P. (Brussels, Belgium)
Schuind F. (Brussels, Belgium)
Van Holder C. (Brussels, Belgium)
Van Sint Jan S. (Brussels, Belgium)
Wylock P. (Brussels, Belgium)
**Daily Program at a Glance**

<table>
<thead>
<tr>
<th>March 27 (Thursday)</th>
<th>March 28 (Friday)</th>
<th>March 29 (Saturday)</th>
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<tr>
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<td>Registration</td>
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<tr>
<td>08.00</td>
<td>Coffee and croissants</td>
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<tr>
<td>08.15</td>
<td>Transfer Genval - Faculty of Medicine</td>
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<tr>
<td>08.30</td>
<td>An Introduction to Anatomy and Clinical Examination of the Hand and Wrist (1)</td>
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<tr>
<td>09.00</td>
<td>Course, Session A</td>
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<td>10.20</td>
<td>Coffee-break</td>
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<tr>
<td>10.24</td>
<td>An Introduction to Anatomy and Clinical Examination of the Hand and Wrist (2)</td>
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<tr>
<td>10.40</td>
<td>Carpus</td>
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<td>10.45</td>
<td>Coffee-break</td>
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<tr>
<td>11.00</td>
<td>Course, Session B</td>
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<tr>
<td>12.32</td>
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<td>13.00</td>
<td>Box-Lunch</td>
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<td>13.02</td>
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<td>13.30</td>
<td>Course, Session C</td>
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<tr>
<td>14.00</td>
<td>Carpal Tunnel and Flexor Apparatus</td>
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<td>14.50</td>
<td>Course, Session D</td>
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<td>16.04</td>
<td>Advances in Anatomy and Clinical Examination of the Hand and Wrist – General Conclusion</td>
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<td>16.40</td>
<td>Health Break</td>
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<td>16.46</td>
<td>Coffee-break</td>
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<td>17.06</td>
<td>Finger</td>
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<td>17.30</td>
<td>Brachial Plexus</td>
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<td>18.07</td>
<td>Social Program</td>
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<td>18.45</td>
<td>Cocktail at the Museum of Medicine, Faculty of Medicine</td>
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<td>19.00</td>
<td>Cocktail in the Château</td>
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<tr>
<td>20.00</td>
<td>TRANSFER TO GENVAL</td>
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<tr>
<td>20.45</td>
<td>Free evening</td>
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</tbody>
</table>

**Program**

**Program**

**Wednesday, March 26, 2003**

07.30-08.30 Registration – Coffee and Croissants

**Thursday, March 27, 2003**

08.00 Transfer by luxury coach Genval – Faculty of Medicine, Université libre de Bruxelles, Erasme Campus, Anderlecht

08.45 Change and Preparation to the Dissections

09.00-10.45 Hands-on Course, Session A

10.45 Coffee-Break

11.00-13.00 Hands-on Course, Session B

13.00 Box-Lunch

13.30-15.30 Hands-on Course, Session C

15.30 Coffee-Break

15.45-18.30 Hands-on Course, Session D

18.30 Change

18.45 Cocktail at the Museum of Medicine, Faculty of Medicine

20.00 Transfer by coach Faculty of Medicine - Genval

20.45 Free evening

**Friday, March 28, 2003**

07.30-08.30 Registration – Coffee and Croissants

08.30-10.20 **Session 1 : An Introduction to Anatomy and Clinical Examination of the Hand and Wrist (1)** (Moderators : A.I. Kapandji, M. Rooze)

08.30 Opening Address

F. Schuind, M. Rooze (Brussels, Belgium)

14.00-16.29 **Session 3 : Carpal Tunnel and Flexor Apparatus** (Moderators : P.C. Amadio, P. Wylock)

08.40 Arterial Anatomy of the Hand

F. Brunelli (Paris, France)

14.20 Role of the Flexor Retinaculum

P. Ledoux (Brussels, Belgium)

14.25 Discussion

09.00 Vascular Malformations of the Upper Extremity

J.L. Restrepo (Nancy, France and Medellin, Colombia)

14.45 Discussion

09.20 Discussion
14.50 Anomalous Muscles and Nerve Compression at the Wrist
L. De Smet (Pellenberg, Belgium)

15.10 Discussion

15.15 In Vitro Study of Moment Arms of the Wrist Primer Movers : Effect of Resection of the Flexor Retinaculum
P. Salvia, M. Van Cabeke, V. Feipel, F. Schuind (Brussels, Belgium)

15.35 Discussion

15.40 Changes of the Distribution of Sensory Disturbances after Carpal Tunnel Decompression
M. Bednarski, A. Zyluk, P. Puchalski (Szczecin, Poland)

15.47 Discussion

15.52 Functional Anatomy of Flexor Tendons, with a Description of Their Pulleys and Vinculae
F. Brunelli (Paris, France)

16.12 Histogenesis and Morphology of the Flexor Tendon Pulley System in the Human Embryonic Hand
K. Drossos, M.A. Lambot, M. Remmelynck, F. Schuind (Brussels, Belgium)

16.19 The Determination of the Flexor Profundus Tendon Sheath in the Hand and Wrist
J.V. Berthe, H. Vandewalle, B. Van Den Heule, M. Rooze, J.P. Moermans (Brussels, Belgium)

16.36 Discussion

16.46 Coffee-Break and Visit of the Commercial Exhibition

17.00 Session 4 : Finger
(Moderators : A.I. Kapandji, O. Barbier)

17.06 Some Factors Influencing 3-D Modeling of the Human Finger
K.J. van Zwieten, P.L. Lippens (Diepenbeek, Belgium)

17.13 Discussion

17.18 Percutaneous Osteotomy of Phalanges and Metacarpals Mal-Union
E. Gonzalez-Hernandez, L. Osorio, I. Indriago, S.L. Rojas, A. Badia, R. Khouri (Miami, FL, USA)

17.25 Discussion

17.27-13.02 Session 8 : Carpus
(Moderators : J.M.G. Kauer, P. Ledoux)

10.44 IntraCarpal Lesions Associated with Wrist Fractures : Radio-Clinic Prospective Study
G. Lamraski, M. Vancabeke, J. Alexiou, S. Devos, Ph. Putz (Brussels, Belgium)

10.44 Session 7 : Forearm, Distal Radius, Distal Radio-Ulnar Joint
(Moderators : M. Garcia-Elias, F. Burny)

08.15-10.24 IntraCarpal Lesions Associated with Wrist Fractures : Radio-Clinic Prospective Study
G. Lamraski, M. Vancabeke, J. Alexiou, S. Devos, Ph. Putz (Brussels, Belgium)

08.22 Discussion

08.34 Basic Wrist Research Results and their Practical Consequences in the Treatment of Colles’ Type Fractures
G. Seress, L. Kurucz, K. Kovács, A. Borkó, H. Osgyán (Vac, Hungary)

08.46 Discussion

10.09 The Distal Radio-Ulnar Ligaments – Ten Years after a Famous Controversy
F. Schuind (Brussels, Belgium)

10.24 Coffee-Break and Visit of the Commercial Exhibition

10.34 Variation of Distal Ulna and Distal Radio-Ulnar Joint
N. Hollevoet (Gent, Belgium)

10.39 About the Orientation of the Sigmoid Notch
L. De Smet (Pellenberg, Belgium)

10.49 Discussion

10.59 The Extended Flexor Carpi Radialis Approach : a New Perspective for the Distal Radius
J.L. Orbay, A. Badia, I. Indriago, R.K. Khouri, E. Gonzalez, D.L. Fernandez (Miami, USA)

10.64 Discussion

11.09 A New Treatment Concept of Severely Comminuted Intra-Articular Fractures of the Distal End of the Radius : Minimal Invasive Internal Osteosynthesis and External Fixation
K. Mader, T. Gausepohl, M. Schneider, T.C. Koslowsky, J. Heidemann, D. Pennig (Köln, Germany)

11.18 The Double Osteotomy of Radius and Ulna for Correction of Madelung’s Deformity
V. Khanduja, Z. Dannawi, L. Ng, L. Heras (London, United Kingdom)

11.23 Discussion

11.28 Forearm Tomodensitometry : Slices Levels Determination to Calculate the Centers of Rotation
C. Géhanne, V. Feipel, B. Stallenberg, F. Schuind (Brussels, Belgium)

11.33 Discussion

11.38 Torque Effects of Various Treatments for Kienböck’s Disease
R. van Riet, H. Hirahara, P. Neale, Y.-T. Lin, K.-N. An, R. Berger (Edegem, Belgium - Rochester, MN, USA)

11.44 Discussion

11.49 The Extended Flexor Carpi Radialis Approach : a New Perspective for the Distal Radius
J.L. Orbay, A. Badia, I. Indriago, R.K. Khouri, E. Gonzalez, D.L. Fernandez (Miami, USA)

11.54 Discussion

12.01-18.00 Session 5 : Brachial Plexus
(Moderators : J.L. Restrepo, N. Hollevoet)

17.30 Anatomy of Thoracic Outlet Syndrome and Semiology
A. Carlier (Liège, Belgium)

17.35 Discussion

17.55 The Isolated Drop Thumb : Unusual Presentation of Non-Traumatic Posterior Interosseous Nerve Palsy
G. Stables, L. Benyon, F.S. Fahmy (Chester, United Kingdom)

18.10 Discussion

18.20 Changes of the Distribution of Sensory Disturbances after Carpal Tunnel Decompression
M. Bednarski, A. Zyluk, P. Puchalski (Szczecin, Poland)

18.25 Discussion

18.40 Functional Anatomy of Flexor Tendons, with a Description of Their Pulleys and Vinculae
F. Brunelli (Paris, France)

18.45 Session 6 : Round Table and Case Presentations – Peripheral Nerves, Flexor Tendons
(Moderators : A. Kapandji, V. Feipel)

19.00 Cocktail in the Château

20.00 Free Evening
The Role of Computed Tomography in Diagnosis of Scapho-Lunate Instability
I.O. Goloubev (Yaroslavl, Russia)

Gripping Force
L. De Smet (Pellenberg, Belgium)

Advances in Clinical Examination of the Wrist: Differential Lidocaine Injection Test, Lunate Shift Test, and Sennwald Triquetral Lift Test
D.L. Nelson (San Francisco, CA, USA)

Conventional Bone Grafting
O. Barbier (Brussels, Belgium)

Vascular Anatomy and Pedicled Bone Graft from the Distal Palmar Forearm
M. Haerle, C. Mathoulin (Tübingen, Germany)

Unusual Fracture of the Scaphoid in a Badminton Player
J.P. Brutus, N. Chahidi, Y. Baeten, P. Ledoux, L. Kinnen, J.P. Moermans (Brussels, Belgium)

Callotaxis Lengthening of the Capitate After Resection of the Lunate for the Treatment of Stage III Lunate Necrosis—A Five Year Follow-Up
R. Hierner, K. Wilhelm (Leuven, Belgium)

Island Flaps
F. Brunelli (Paris, France)

Anatomy of the Posterior Interosseous Flap
A. Carlier (Liège, Belgium)

Presentation 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 (7 min. for most free papers).

The standard presentation format is 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 “Hand Anatomy Symposium” to receive the reduced rate for the dates March 26 through March 30.

Indicative rate: SINGLE 696 € — included: 4 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
Accreditation for the Symposium: 438.0020, accreditation type 3, organized nr. 2.180, U.F.C. 120 points.
A certificate will be provided to interested participants.
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 26, March 27 and March 30. One of us will meet you 15 min prior to the departure of the bus, at the Airport meeting point (gare du Midi).

Timetable :

<table>
<thead>
<tr>
<th>Zaventem Airport</th>
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<tr>
<td>Gare du Midi</td>
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<td>Genval</td>
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<td>Zaventem</td>
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Genval may also be reached by car (15 min from Brussels on highway E111 Brussels-Namur-Luxembourg).

Social Program

Jacques Brel, who left us 25 years ago, is without question one of the greatest poets of the 20th Century. Born in Brussels in 1929, Jacques Brel is above all known for his songs. Many have been adapted in English. Jacques Brel’s life was a great adventure, which he lived intensely. « Seeking another kind of freedom », he decided in 1966, at the top of his success, to stop touring and gave his famous farewell concerts at the Olympia of Paris and at the Palais des Beaux-Arts of Brussels. He then mounted « l’Homme de la Mancha » and acted in various films before directing his own productions. After treatment for lung cancer in 1973-1975, he sailed the Caribbeans before establishing in the Marquesas Islands. He recorded his beautiful last LP in 1977. He died in 1978 in Paris and is buried in Hiva Oa, in the Marquesas, not far from Gauguin.

On the occasion of the 25th anniversary of his death, an exceptional exhibit is organized in Brussels. Through documents unpublished before, Jacques Brel will guide you through his life as a man and artist, on the road to his dreams, revealing many facets of his rich personality. Covering more than 3000 m², the exhibit « Brel, the Right to dream » will open just one week before Genval’s meeting. Reservations for the congressists have already been secured.

A nice banquet is then organized close to Brussels Grand Place. Transport from Genval and return has been arranged in a luxury coach. Please join us!
REGISTRATION FORM
To be filled in and returned as soon as possible

Name .................................................................
First name ..............................................................
Specialty .................................................................
Title ........................................................................
Institution ............................................................... 
Address .....................................................................
City .............. Country ........ Zip ......................
Phone ....................................... Fax ................................
E-mail : ....................................................................
Arrival date .................... Departure date ............... 
Special requests (diets, etc.) ........................................

Please fill in below as appropriate.
❑ I will participate in the Hand and Wrist Anatomy Symposium
(March 28-29, 2003).
❑ I would also like to participate in the Presymposium Hands-
On Course of Hand Surgical Anatomy – March 27, 2003; the
number of participants is limited; if some participants cannot
be accepted, the fees will be reimbursed at no charge.
❑ I would like to attend the banquet and visit of the Jacques
❑ Please send me more announcements.
❑ My registration fees are paid as follows :
  ❑ Enclosed check
  ❑ Money order to Belgian account
    GEMS 001-2343991-62
  ❑ Credit card (Euro/Master, Visa)
    Card type : .........................................................
    Card account number : ........................................
    Cardholders’ name : ..............................................
    Expiration date (mo./yr.) : ....................................

SIGNATURE ........................................... DATE ..............