4th Congress of the European Federation of National Associations of Orthopaedics and Traumatology

June 3 - 8, 1999
Brussels

E F O R T

Third Announcement & Preliminary Programme
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**Observer**

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**Associate Scientific Member**

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WELCOME TO THE 4TH EFORT CONGRESS

As the President of the EFORT Congress in 1999 and the Chairman of the Organising Committee, it is our honour and pleasure to inform you that the 4th Congress of the European Federation of National Associations of Orthopaedics and Traumatology will be held in Brussels from Saturday June 5 till Tuesday June 8, 1999.

The Congress will be organised by EFORT, with the help of both Belgian orthopaedic societies, the ‘Belgische Vereniging voor Orthopedie en Traumatologie’ and the ‘Société Belge de Chirurgie Orthopédique et de Traumatologie’.

EFORT Congresses have already gained an outstanding reputation in the orthopaedic community. With more than 5,000 participants at the last Congress in Barcelona the Brussels Congress is expected to be attended in large numbers. The close collaboration between EFORT, the European Orthopaedic Research Society, and the different orthopaedic specialty societies will again be emphasized, with the meeting of the EORS preceding the EFORT Congress on Thursday June 3 and Friday June 4, and the Specialty Day being held on June 6. This will assure a unique blend of postgraduate lectures, guest lectures, symposia, free communications, and poster exhibitions.

We look forward to being your hosts in Brussels in June.

Prof. Dr. Otto SNEPPEN
President EFORT 1999

Prof. Dr. P.P. CASTELEYN
Chairman Organising Committee

Organising Secretariat

MEDICONGRESS
Waalpoel 28/34, B-9960 Assenede, Belgium
✆ +32 (0)9 344 39 59
✆ +32 (0)9 344 40 10
@ congresses@medicongress.com

All recent information on the EFORT Congress as well as registration forms can be found on the INTERNET at:
Brussels – the heart of Europe

Brussels is a multicultural and multilingual city, full of charm and packed with attractions to be enjoyed. Famous sites such as the Grand’Place, the Atomium and the centuries old “Manneken Pis” are the symbols of an irreverent city that has always loved a joke.

The Belgian comic strip tradition may owe something to former artists who, from Breughel and Rubens to Magritte and Delvaux, have made Belgian painting famous. Although many of their works are scattered around the world, many of them, as well as other works of art, can still be admired in the innumerable museums and churches of Brussels and surrounding cities such as Gent, Brugge, Liège and Antwerpen, which are all less than 1 hour away.

Brussels is also one of the world’s great eating places and if you haven’t spent too long enjoying chocolate and pralines, perhaps you will find time to taste one of the hundreds of Belgian beers on offer.

The Venue

The location for the EFORT Congress will be the Brussels International Conference Centre (BICC) at the Brussels Exhibition Centre, also known as the “Heizel”, where you also can find the Atomium. It overlooks the city from a hill on its northern outskirts.

The Brussels International Conference Centre is only minutes from the city centre by “metro” and 15 minutes by car from the Brussels international airport. All participants will receive a “metro” ticket enabling them to use the underground free of charge during the EFORT Congress days.

Sabena Official Carrier

Sabena is the “official carrier” of the 4th EFORT Congress. All participants will receive a Sabena Discount Voucher, guaranteeing considerable reductions on Sabena flights.
## COMMITTEES

### EFORT Executive Board and Co-opted Members 1998-1999

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<tr>
<td>President</td>
<td>Otto Sneppen</td>
<td>DK</td>
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<td>Vice-President</td>
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<td>Secretary</td>
<td>Anthony Catterall</td>
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<td>Wolfhart Puhl</td>
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### Organising Committee EFORT Congress 1999

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<td>Louis Lootvoet</td>
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<td>René Verdonik</td>
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## COMMITTEES

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### Organising Secretariat

### MEDICONGRESS

Waalpoel 28 / 34
B-9960 Assenede
Belgium

Before and after the EFORT Congress

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- +32 (0)9 344 40 10
- congresses@medicongress.com

During the EFORT Congress (June 3 – June 8)

- +32 (0)2 474 85 07
- +32 (0)2 474 82 07
- congresses@medicongress.com
## CONGRESS SCHEDULE

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| AFTERNOON | EORS       | EORS | EFORT EAMST | EFORT | EFORT | EFORT | EFORT | EFORT |
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|           | Registration | Wine | Registration | Specialised Symposiums | Specialised Symposiums | Specialised Symposiums | Specialised Symposiums | Specialised Symposiums |
|           | Evening | EORS | EORS     | EFORT | EORS | EFORT | EORS | EORS |
|           | EORS | EORS     | EORS     | EFORT | EORS | EFORT | EORS | EORS |
|           | Wine and Cheese | Banquet at Concert Noble | Banquet at Concert Noble | Banquet at Concert Noble | Banquet at Concert Noble | Banquet at Concert Noble | Banquet at Concert Noble |
|           | Evening | EORS | EORS | EFORT | EORS | EFORT | EORS | EORS |
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**Important**

Please note that registration for the 4th EFORT Congress **closes on April 30, 1999**. Applications received after this date will not be handled and will have to be resubmitted at the on-site registration desk of the Congress.
### Important

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#### Wednesday, June 2

**18.00 – 21.00** Registration and Welcome Drink

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#### Thursday, June 3

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>07.00</td>
<td>Registration</td>
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<tr>
<td>07.45</td>
<td>Opening Ceremony</td>
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<tr>
<td>08.00</td>
<td>Session I: Joint Replacement Hip</td>
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<tr>
<td>09.30</td>
<td>Break</td>
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<tr>
<td>10.00</td>
<td>Mario Boni Award</td>
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<td>10.30</td>
<td>Instructional Course: Tissue Engineering</td>
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<tr>
<td>11.30</td>
<td>Lunch Break</td>
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<tr>
<td>12.00</td>
<td>Session IV: Joint Replacement Knee</td>
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<tr>
<td>13.30</td>
<td>Break</td>
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<tr>
<td>15.00</td>
<td>Poster Session</td>
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<tr>
<td>15.30</td>
<td>Session VI: Implant Wear</td>
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<tr>
<td>18.00</td>
<td>Poster Session</td>
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#### Wine and Cheese Reception

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#### Friday, June 4

**room A**

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>08.00</td>
<td>Session VIII: Biomaterials</td>
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<tr>
<td>09.30</td>
<td>Break</td>
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<tr>
<td>10.00</td>
<td>Instructional Course: Implant Wear</td>
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<tr>
<td>11.30</td>
<td>General Assembly EORS</td>
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<tr>
<td>12.00</td>
<td>Lunch Break</td>
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<tr>
<td>13.30</td>
<td>Session XI: Cartilage</td>
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<tr>
<td>15.00</td>
<td>Break</td>
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<td>15.30</td>
<td>Session XIII: Knee</td>
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**room B**

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>08.00</td>
<td>Session IX: Biomechanics</td>
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<tr>
<td>09.30</td>
<td>Break</td>
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<tr>
<td>10.00</td>
<td>Session X: Computer Aided Techniques</td>
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<tr>
<td>11.30</td>
<td>Poster Session</td>
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<td>12.00</td>
<td>Lunch Break</td>
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<tr>
<td>13.30</td>
<td>Session XII: Spine</td>
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<tr>
<td>15.00</td>
<td>Break</td>
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<tr>
<td>15.30</td>
<td>Session XIV: Knee</td>
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</table>

**17.00** Closing Ceremony & Poster Award

**20.00** Banquet at the ‘Concert Noble’
June 3 – 8, 1999
Brussels

E F O R T

4th Congress of the European Federation of National Associations of Orthopaedics and Traumatology

9th Conference of the EUROPEAN ORTHOPAEDIC RESEARCH SOCIETY – EORS
18.00 – 21.00 Registration and Welcome Drink

08.00 Influence of the extra-medullar design on the femoral component stability and on the interfacial stress
N. Ramaniraka, L. Rakotomanana, P. Rubin, P.F. Leyvraz (Lausanne)

08.15 Fixation and bone remodelling around new conservative hip design
M. Coathup, ZM. Oden, GW. Blunn, PS. Walker (Stanmore)

08.30 Three-dimensional stability of cemented hip implants
T. Orr, AD. Speirs, MA. Slomczykowski, LP. Nolte (Bern)

08.45 The prevention of loosening in total hip replacement using guided bone regeneration
R.P. Bhumbra, PS. Walker, AB. Berman, J. Emmanuel, DS. Barrett, GW. Blunn (Stanmore & Southampton)

09.00 A retrieval study of capital hip prostheses with titanium alloy stems
L. McGrath, D. Shardlow, E. Ingham, M. Stone, J. Fisher (Leeds)

09.15 Histology and tribology of metal-on-metal bearings in cementless THA
M. Böhler, K. Knahr, F. Gottsauner-Wolf, A. Walter, H. Plenk jr (Vienna)

09.30 Break

09.45 Session I: Joint Replacement Hip

10.00 Mario Boni Award

10.30 Instructional Course: Tissue Engineering
F. Luyten, M. Sittinger, St. Nehrer

12.00 Lunch Break
Session II: Fracture Healing

08.00 Biomechanical evaluation of a new less invasive stabilization system (LISS) for the internal fixation of distal femur fractures
A. Marti, Ch. Fankhauser, A. Frenk (Bettlach)

08.15 Importance of muscle forces on the loading of fractured tibia after unreamed nailing
M. Heller, F. Mandruzzato, M. Hehli, L. Claes, NP. Haas, GN. Duda (Berlin, Ulm & Davos)

08.30 Medullary contamination after external fixator pin-tract infection
J. Clasper, A.H.R.W. Simpson, P.E. Watkins (Salisbury)

08.45 The osteogenic ability of free periosteal autografts in tibia fractures with severe soft tissue damage: an experimental study
P. Reynders, J.H.R. Becker (Leuven & Pretoria)

09.00 Effect of salmon calcitonin (SCT) in fracture healing of normal and orchectomized rats
I. Koulouris, L. Khaldi, I. Dontas, P. Raptou, G.P. Lyritis (Athens)

09.15 The effects of nicotine on fracture healing in rats
H. Yorgancil, R.A. Ozerdemoglu, F. Korkusuz, N. Erdogan, E.F. Mumcu (Isparta)

09.30 Break

Session III: Bone Biology

10.00 Mutual relationships among the properties of human tibial cancellous bone
M. Ding, A. Odgaard, CC. Danielsen, I. Hvid (Aarhus)

10.15 Bone mineral and mechanical properties of incorporating fresh structural bone allografts after peripheral nerve resection in the rat
J.E. Madsen, V. Halvorsen, JA. Falch, L. Nordsletten (Oslo)

10.30 Effects of high frequency mechanical vibration on human osteoprogenitor cells in vitro

10.45 Effects of tourniquet ischaemia on microcirculation and leucocyte-endothelium interaction of isogeneically transplanted bone in mice
A. Sckell, TJ. Demhartner, CR. Fraitzl, M. Leunig (Bern)

11.00 Bone mass and microstructure in growth hormone transgenic mice
F. Eckstein, H. Graichen, EM. Lochmüller, A. Weusten, E. Wolf (München)

11.15 Stimulation of primary osteoblasts by β-FGF, RHL-BMP² and RX-BMP⁴ in an in-vitro-model
U. Mayr-Wohlfart, S. Kessler, G. Ravalli, K.P. Guenther, W. Puhl (Ulm)

11.30 Workshop: Implant Image Analysis
R. Lemaire

12.00 Lunch Break
Session IV: Joint Replacement Knee

13.30 Changing of the knee biomechanics following medial unicompartmental knee arthroplasty, an cadaver study
T.V. Gunther, I. Udvarhelyi, T. Lakatos (Budapest)

13.45 The effect of the preoperative bone quality on the fixation of the tibial component in total knee arthroplasty
M.G. Li, K.G. Nilsson (Umea)

14.00 Fixation of the tibial component after TKR: influence of the bone remodeling and the lower limb misalignment on the stability, the bone-implant stress transfer and the cement stress
A. Terrier, L. Rakotomanana, P. Leyvraz (Lausanne)

14.15 An analysis of tibial component and soft tissue shear loads during a force controlled walking cycle for multiple TKR designs
J. Desjardins, P.S. Walker, H. Haider, J. Perry (Stanmore)

14.30 Influence of joint area constraint on migration of the tibial component in total knee arthroplasty
J. Uvehammer, J. Karrholm, L. Carlsson, L. Regner, P. Herberts (Gothenburg)

14.45 Will mobile bearing knees reduce polyethylene wear compared to fixed bearing designs?
S. Sathasivam, P.S. Walker, P. Campbell (Stanmore & Los Angeles)

15.00 Break

Session V: Soft Tissue Biology

13.30 The influence of soft tissue constraint on the mechanical performance of different TKR designs
J. Desjardins, P.S. Walker, H. Haider, J. Perry (Stanmore)

13.45 Biomechanics of direct tendon to bone interference fit fixation in-vivo
A. Weiler, RFG. Hoffmann, R. Peine, HJ. Bail, A. Pashmineh-Azar, SJ. Kolbeck, NP. Sudkamp (Berlin)

14.00 Fibrocartilage in the transverse ligament of the human atlas

14.15 Microvasculature of the tibialis anterior tendon
W. Petersen, V. Stein, B. Tillmann (Kiel)

14.30 DNA analysis of a transplanted cryopreserved meniscal allograft
P. Debeer, R. Decorte, J. Bellemans (Leuven & Pellenberg)

14.45 Tendon healing stimulated with bmps
C. Forslund, P. Aspenberg (Lund)

15.00 Break

15.30 Poster Session
Session VI: Implant Wear

16.30 The simulation of wear in UHMWPE acetabular cups with smooth and scratched femoral heads
P. Barbour, MH. Stone, J. Fisher (Leeds)

16.45 Size and shape characterization of UHMWPE, metal and PMMA bone cement particles from the same cases in cemented hip arthroplasty
H. Iwaki, A. Kobayashi, P.A. Revell, M.A.R. Freeman, Y. Yamano (Osaka)

17.00 Macrophages and fibroblasts in coculture demonstrate accentuated response to particulate debris
M. Lind, MCD. Trindade, B. Yaszay, RL. Smith, SB. Goodman (Aarhus & Stanford)

17.15 Role of pro-inflammatory cytokines in the osteolytic activity of polyethylene particle stimulated macrophages
E. Ingham, TR. Green, JB. Matthews, MH. Stone, J. Fisher (Leeds)

17.30 Comparison of the osteolytic potential of clinically relevant particles from different bone cements
E. Ingham, TR. Green, MH. Stone, J. Fisher (Leeds)

17.45 HMWPE, titanium, and cobalt-chromium wear debris particles are phagocytosed by primary human osteoblasts and mg63 osteoblast-like cells and affect osteoblast differentiation and local factor production depending on their chemical composition

18.00 Poster Session

Wine and Cheese Evening

Session VII: Osteoarthrosis

16.30 Strength profiles in the subchondral bone plate and the underlying subarticular spongiosa of human tibial heads
M. Mueller-Gerbl, M. Dalstra, M. Ding, R. Putz, I. Hvid (Munich & Aarhus)

16.45 Cartilage repair after low-power laser biostimulation, an “in vivo” experimental study

17.00 Oxygen free radicals and nitric oxide play important roles in the injury mechanism of degenerative joint diseases

17.15 Calcitonin inhibits evolution of osteoarthritic (OA) lesions, an experimental study in rabbits
N. Papaioannou, N. Krallis, L. Khaldi, Gr. Skarantavos, G.P. Lyritis (Athens & Kifissia)

17.30 Joint cartilage repair in rabbits with chondrocyte-transplants in PGLA fleece scaffolds
C. Perka, M. Sittinger, RS. Spitzer, O. Schultz (Berlin)

17.45 Different gene expression in local and generalized osteoarthritis
J. Stoeve, KP. Guenther, W. Puhl, HP. Scharf (Ulm)

18.00 Poster Session

Wine and Cheese Evening
Session VIII: Biomaterials

08.00 The effect of osteoprotegerin ligand (OPGL) and osteoprotegerin on arthroplasty derived macrophage-osteoclast differentiation
A. Sabokbar, I. Itonaga, D. Lacey, N.A. Athanasou (Oxford & Thousand Oaks)

08.15 Osteogenic protein 1 combined with impacted allograft stimulates bone formation around hydroxyapatite coated implants

08.30 Comparison between bone mineral density and mechanical properties of impacted allograft and HAP granules implanted in bone defect

08.45 An injectable tricalciumphosphate/bm-2 composite induces enhanced healing of bone defects
C. Niedhart, S. Koch, U. Maus, E. Redmann, CH. Siebert, FU. Niethard (Aachen)

09.00 Mechanical characteristics of biomaterial particles used as bone substitutes for morsellized allografts
N. Verdonschot, CTH. Van Hal, BW. Schreurs, P. Buma, R. Huiskes (Nijmegen)

09.15 Prophylaxis with tobramycin-containing bone cement versus systemic antibiotic in a rabbit infection model
M. Nijhof, H.P. Stallmann, A. Fleer, W.J.A. Dhert, A.J. Verbout (Utrecht)

09.30 Break

Session IX: Biomechanics

08.00 New approach for the study of musculo-skeletal movement; roentgen single-planar photogrammetric analysis (RSPA)
X. Yuan, L. Ryd (Lund)

08.15 Computational models of tissue differentiation - prediction of changes in mechanical stimuli (fluid flow and tissue microstrain) during cyclic loading
D. Lacroix, PJ. Prendergast (Dublin)

08.30 Wolff’s law can be explained as an effect of mechanically stimulated bone-cell metabolism
R. Huiskes, R. Ruimerman, GH. VanLenthe, JD. Janssen, (Nijmegen)

08.45 Assessment of bone mechanical properties in-vivo from micro-Fe models based on MR-images
B. Van Rietbergen, S. Majumdar, DC. Newitt, M. Kothari, P. Rüegsegger (Zürich & San Francisco)

09.00 The prospects of estimating trabecular-bone tissue properties from ultrasound, micro-CT and micro-finite element analysis
H. Van Lenthe, J. vanden Bergh, A. Hermus, R. Huiskes, (Nijmegen)

09.15 In vitro investigation of fluid flow around simulated femoral components of differing geometry and surface finish
R. Crawford, M. Evans, RSM. Ling, DW. Murray (Oxford)

09.30 Break
Friday, June 4

10.00 Instructional Course: Implant Wear
   E. Schneider

11.30 General Assembly EORS

12.00 Lunch Break

Session X: Computer Aided Techniques

10.00 3D MR-Based motion analysis of the supraspinatus and the shoulder bones during elevation
   H. Graichen, T. Stammberger, H. Bonel, K.H. Engelmeier, M. Reiser, F. Eckstein (München)

10.15 The development of a 3D FE-model of the glenoid
   M. Dalstra, PM. Cattaneo, LH. Frich (Aarhus)

10.30 Digital bone histomorphometry - new methods for analyzing trabecular bone architecture
   S. Klug, J. Mueller, A. Werner, M.T. Krumrey, G. Weseloh (Erlangen)

10.45 Digital automated RSA compared to conventional RSA
   E. Valstar, HA. Vrooman, L. Toksvig, L. Ryd, RGHH. Nelissen (Leiden & Lund)

11.00 Computer navigated screw insertion in real rapid prototyping pelvis models
   P. Peters, L.P. Nolte, R. Burgkart, R. Gradinger, W. Plötz (Lübeck)

11.15 Comparison of electro-optical and electro-magnetic tracking systems for the preparation of minimal access surgical training environments
   S. Grange, T. Bunker, J. Cooper, S. Waldhausen (Exeter)

11.30 Poster Session

12.00 Lunch Break
### Session XI: Cartilage

<table>
<thead>
<tr>
<th>Time</th>
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<th>Authors</th>
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<tbody>
<tr>
<td>13:30</td>
<td>Importance of mechanical conditions on osteochondral defect healing</td>
<td>G. Duda, R. Reinmann, J. Burns, M. Heller, G. Schmidmaier, H. Bail, S. Kolbeck, K. Stosch-Wiechert, M. Raschke, N.P. Haas (Berlin)</td>
</tr>
<tr>
<td>13:45</td>
<td>Determination of subchondral plate advancement in healing osteochondral defects</td>
<td>Y. Qiu, B.F. Shahgaldi, F.W. Heatley (London)</td>
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<tr>
<td>14:00</td>
<td>Arthroscopic measurement of articular cartilage stiffness</td>
<td>T. Lyra, I. Kiviranta, M. Niinimäki, J. Töyräs, H.J. Helminen, J.S. Jurvelin (Kuopio)</td>
</tr>
<tr>
<td>14:30</td>
<td>Culture of chondrocytes in alginate-collagen gels</td>
<td>B. Müller, S. Rupp, R. Seil, V. Dindoyal, D. Kohn (Homburg)</td>
</tr>
<tr>
<td>14:45</td>
<td>Linkage of chondroitin-sulfate to a type 1 collagen scaffold stimulates the proliferation rate and matrix production of seeded chondrocytes in vitro</td>
<td>J.L.C. Van Susante, J. Pieper, P. Buma, TH. van Kuppevelt, H.M. van Beuningen, P.M. vander Kraan, J.H. Veerkamp, (Nijmegen)</td>
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<td>15:00</td>
<td>Break</td>
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### Session XII: Spine

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<th>Authors</th>
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<tbody>
<tr>
<td>13:30</td>
<td>Load distribution in vertebral bodies is an indication of osteoporosis</td>
<td>J. Homminga, H. Weinans, W. Gowin, D. Felsenberg, R. Huiskes (Nijmegen, Rotterdam &amp; Berlin)</td>
</tr>
<tr>
<td>13:45</td>
<td>Compressive force transmission in the human cervical spine: effect of superimposed flexion and extension postures</td>
<td>P. Cripton, G.A. Dumas, L.P. Nolte (Bern &amp; Kingston)</td>
</tr>
<tr>
<td>14:00</td>
<td>Lumbosacral remodelling in experimental spondylolisthesis</td>
<td>H. Österman, D. Schlenzka, K. Österman (Helsinki)</td>
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<tr>
<td>14:15</td>
<td>Motor cortical hyperexcitability and scoliotic spinal deformity in rats with experimentally induced sensory hemicortectomy</td>
<td>C. Barrios, J. Domenech, C. Barrios, J.A. Barcia, A. Pascual-Leone (Valencia)</td>
</tr>
<tr>
<td>14:30</td>
<td>Kinematic intervertebral spacer for the cervical spine</td>
<td>R.J. Sabitzer, F.K. Fuss (Vienna)</td>
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<tr>
<td>14:45</td>
<td>Computer simulation of transpedicular spinal surgery</td>
<td>D. Scale (Frankfurt)</td>
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<tr>
<td>15:00</td>
<td>Break</td>
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</table>
Session XIII: Knee

15.30 Longitudinal tibial rotation during knee flexion: a dissection, MRI and RSA study in the living and cadaveric knee
J. Karrholm, S.B. Brandsson, M.A.R. Freeman, H. Iwaki, V. Pinskerova (Goteborg)

15.45 Isokinetic evaluation of ACL reconstruction. Surgical procedure influence and rehabilitation implications
J.L. Croisier, JP. Huskin, JM. Crielaard (Liège)

16.00 The trajectory of the human knee joint
G. Krakovits, Z. Juharosi, M.E.L. Sass (Budapest)

16.15 Measurements of the patellar deformation
B. Zurfluh, D. Wirz, B. Göpfert, N.F. Friederich, W. Müller, (Basel)

16.30 Triathletes exhibit on increased knee joint cartilage thickness compared with physically inactive individuals
R. Mühlbauer, S. Lukasz, S. Faber, T. Stammberger, F. Eckstein (Munich)

16.45 Fibrillin and elastin: localisation and role in human knee enthesis
A. Gigante, C. Chillemi, M. Travasi, S. Manzotti (Ancona)

17.00 Closing Ceremony
Poster Award

19.00 Banquet

Session XIV: Miscellaneous

15.30 The behaviour of peripheral nerves during lower leg lengthening using the Ilizarov-method
B. Fink, E. Neuen-Jacob, J. Lehmann, A. Francke, W. Rüther (Hamburg & Düsseldorf)

15.45 Physiological, macroanatomical and histological studies on the rat sciatic nerve following use of a new nerve lengthening technique
M. Kröber (Heidelberg)

16.00 Positional cloning of a novel gene affected in synpolydactyly
P. Debeer, E.F.P.M. Schoenmakers, J.P. Fryns, G. Fabry, W.J.M. Van de Ven (Leuven)

16.15 Repair of diaphyseal bone defects by non-vascularized allografts. An experimental study on the effect of host immunosupression with cyclosporin A
C. Barrios, J. de Pablos, J. Gil-Albarova, M. Cerdá, F. Gomar-Sancho (Valencia & Pamplona)

16.30 Micro-CT is superior to PQCT and DEXA in detecting differences in experimental tumor osteolysis in animals
A.H.A. Kurth, M. Shea, W.C. Hayes, L. Hovy, R. Müller (Frankfurt)

16.45 Daily interventional administration of a third generation bisphosphonate preserves skeletal integrity in experimental cancer-associated osteolysis
A.H.A. Kurth, S.Z. Kim, F. Bauss, L. Hovy (Frankfurt)
Important

Please note that registration for the EORS Congress closes on April 30, 1999. Applications received after this date will not be handled and will have to be resubmitted at the on-site registration desk of the Congress.

General Information

Chairman Organising Committee
M. Mulier
K.U. Leuven
Dept. of Orthopaedic Surgery
Weligerfeld 1
B-3212 Pellenberg

Chairman Scientific Committee
F. Gottsauner-Wolf
University Clinics Vienna
Dept. of Orthopaedics
Währinger Gürtel 18-20
A-1090 Vienna

Organising Secretariat
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B-9960 Assenede
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Fax +32 (0)9 344 40 10
Email congresses@medicongress.com

Direct Lines during the Congress
Phone +32 (0)2 474 85 07
Fax +32 (0)2 474 82 07

Registration and Fees (in BEF) 100 BEF = 2,48 € = ± 2,95 $

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<td>Non-Member</td>
<td>12,000</td>
<td>14,000</td>
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<tr>
<td>Banquet</td>
<td>2,250</td>
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Registration includes
- Participation in the EORS Congress and all Congress documents
- Coffee, tea at the congress centre
- Welcome Drink during registration
- Cheese and Wine Evening
- Local Public Transport Pass giving access to all local public transport free of charge during the EORS Congress days.

Cancellation
In order to have the registration fee refunded, save 2,500 BEF to cover administration costs, cancellations are to be confirmed in writing to Medicongress. Cancellations are accepted until April 30. For cancellations received after April 30, no refunds can be done. All refunds are settled after the Congress. Participants can have a colleague replace them at any time at a fee of only 1,000 BEF.

Payment by
- Eurocheque in BEF payable to the 4th EFORT Congress
- Amexco – Visa – Eurocard - Diners
- Bank transfer account number: 001-3165587-68
  swift number: CGAK BE BB
  holder of account: 4th EFORT Congress
- ASLK Bank, Wolvengracht 48, 1000 Brussels,
All money transfers must be free of charges to the receiver

Confirmation
Acknowledgement of registration and of receipt of payment will only be sent when both the registration form and payment in full are received. A free local public transport pass and a Sabena reduction voucher will be mailed together with the confirmation of registration.
General Information

Venue and Address
Brussels International Conference Centre – BICC (Heizel)
Belgiëplein - Place de la Belgique, B-1020 Brussels

Car Park
When coming from Gent or Paris, take the northern ring and follow exit 7 bis ‘Expo’.
When coming from Antwerpen, Liège or Namur, follow direction Gent and take exit 7 bis ‘Expo’ of the northern ring.
Signposts will indicate the car park reserved for the EFORT Congress.

Food and Drinks
The BICC has its own restaurants, located in the exhibition halls, where sandwiches and meals can be purchased at reasonable rates.
Coffee counters and drink stations will be installed in various areas at the BICC.

Cheese and Wine Evening
All delegates in the EORS Congress are kindly invited to participate in the Wine and Cheese Evening served in the restaurant of the BICC on Thursday, June 3, immediately after the last session.

Banquet
An exclusive banquet will be organised on Friday, June 4 at the unique venue ‘Concert Noble’, located in the Aarlenstraat – Rue d’Arlon 82, 1040 Brussels. Phone: +32 (0)2 237 02 08.
The banquet will start at 20.00 hrs and pre-registration is mandatory.
The price for participation in the banquet is fixed at 2,250 BEF until April 30 and at 2,500 BEF at the venue (if seats are still available).
There will be no transport from the hotels to the ‘Concert Noble’, but shuttle bus transport from the ‘Concert Noble’ back to the hotels in the city centre will be provided from 23.00 hrs onwards.

Hotel Reservation
For information about hotel reservations, please go to page 111 and fill out the enclosed hotel reservation form. Please note that the following hotels are located in the direct neighbourhood of the ‘Concert Noble’: Stanhope Hotel and the Europe Intercontinental Hotel.

Friday, June 4

EAMST

I. TISSUE BANKING
- Guest speaker
- Free papers
- Round Table

Tissue packaging: which standards?
Skeletal reconstruction after procurement.

With the participation of
- H. Winkler, Vienna
- R. Bloem, Leiden
- D. Donati, Bologna
- H. Stafford, Leicester
- L. Vastel, Paris
- D. Bettin, Munster
- M. Anastasescou, Brussels

II. CLINICAL BONE ALLOGRAFTING
- Free papers
- Round Table

Massive bone allograft after 10 years: Profile of the successful graft?

with the participation of
- A. Taminiau, Leiden
- R. Capanna, Firenze
- D. Donati, Bologna
- G. Missenard, Paris
- Ch. Delloye, Brussels

Fees (BEF):

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# EFORT – SATURDAY – PROGRAMME AT A GLANCE

**ICL = Instructional Course Lecture, FPS = Free Paper Session, SS = Specialised Symposium**

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EFORT

4th Congress of the European Federation of National Associations of Orthopaedics and Traumatology

Saturday, June 5
The registration desk of the 4th EFORT Congress will be open on Friday, June 4 from 12.00 till 20.00 hrs and on Sunday, Monday and Tuesday from 07.00 hrs onwards.

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<th>Time</th>
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<td>08.15</td>
<td>Instructional Course Lecture</td>
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<td>Methodology of outcome studies of the hip</td>
<td>D. Murray (UK)</td>
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<td>THR migration studies</td>
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<td>Assessment of femoral stem migration during a retrospective study: which landmarks? which value is significant? Jardin C., Chantelot C., Migaud H., Ala Eddine T., Duquennoy A. (F)</td>
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<td>Migration measurement of femoral components in total hip arthroplasty - accuracy of EBRA-FCA Biedermann R., Krismer M., Stöckl B., Ornstein E., Franzén H. (A &amp; S)</td>
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<td>Migration patterns of femoral components. Frequency and prediction of revision Krismer M., Biedermann R., Stöckl B., Haid Ch., Fischer M. (A)</td>
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<td>Increased migration of the SHP stem Nivbrant B., Kārrholm J., Söderlund P. (S)</td>
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<td>Two year migration results of the Duraloc cup Stoeckl B., Wimmer C., Krismer M., Landauer F., Nogler M. (A)</td>
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<td>Migration measurement of two acetabular components Eckardt A., Schwitalla M., Heisel C., Seeleitner C., Heine J. (D)</td>
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<td>Osteogenesis</td>
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<td>A histomorphometric analysis of IGF-1 infusion during mandibular distraction osteogenesis in rabbits Stewart K., Weyand B., Van ‘t Hoff R.J., Maffulli N., White S.A. (UK)</td>
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<td>Indication for the change from unilateral to Ilizarov ring fixator Schwer E.H., Siebert C.H., Kaufmann A.M., Wilke M., Weber M. (D)</td>
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<td>Bone mineral content and bone mineral density at the callotasis site after completion of lengthening: a longitudinal study Maffulli N., Cheng J.C.Y., Sher A., Lam T.P. (UK &amp; HK)</td>
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<td>Tibia lengthening complications after Ilizarov technique: a comparative study between leg length inequality and short stature people Caton J.H., Merabet Z., Panisset J.C., Pracros J.P. (F)</td>
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<td>Bone transport technique in the treatment of tibial septic nonunion bone defect: a statistical and clinical comprehensive approach Bauduin G., Lammens J., Degraeve E., Fabry G., Broos P. (B)</td>
</tr>
</tbody>
</table>
The registration desk of the 4th EFORT Congress will be open on Friday, June 4 from 12.00 till 20.00 hrs and on Sunday, Monday and Tuesday from 07.00 hrs onwards.

Saturday, June 5

08.15  Instructional Course Lecture
Changing concepts in the surgery of hallux valgus
  B. Valtin (F)

09.15  Break

09.30  Free Paper Session
Hallux valgus
- Basal metatarsal osteotomy and Keller’s arthroplasty for correction of hallux valgus: comparison of long-term results in the young and active patient
  Zembsch A., Trnka H.-J., Ritschl P. (A)
- Extension osteotomy – a good operation for hallux rigidus
  Rees R., Hartley R.H., Henry A.P.J. (UK)
- Chevron Akin double osteotomy for correction of hallux valgus after the age of 60 years - A 10 years follow-up
  Diebold P.F., Daum B., Litchinko M. (F)
- Ankle block or general for forefoot surgery?
  Kelly A., Dracopoulos G., Rudkin G. (AUS)
- Meyer-Scarf Z osteotomy / Bunionectomy: 15 year long-term follow-up
  Gudas J., Charles D.P.M., Monachino P. (USA)
- A new distal osteotomy of the first metatarsal for moderate and severe hallux valgus with a new internal fixation technique - results of the procedure
  Stoffella R. (A)

10.30  Break

08.15  Instructional Course Lecture
Treatment of metastatic disease of bone
  R. Capanna (I)

09.15  Break

09.30  Free Paper Session
Bone metastases
- Prognostic factors in surgical therapy of osseous metastasis
  Dürr H.R., Maier M., Müller P., Moser Th., Refior H.J. (D)
- Liquid nitrogen as a local adjuvant in intralesional treatment of metastatic bone lesions
  Ippolito V., Piccioni G., Saccalani M. (I)
- Surgical treatment of metastatic lesions of the femur: results in 134 cases
  Piccioni G., Ippolito V., Saccalani M. (I)
- Salvage of the upper extremity in cases of bone metastases of the proximal humerus
  Fuhrmann R., Roth A., Venbrocks R. (D)
- Radical surgery for solitary renal metastases is justified
  Baloch K., Grimer R., Carter S., Tillman R. (UK)

10.30  Break
The registration desk of the 4th EFORT Congress will be open on Friday, June 4 from 12.00 till 20.00 hrs and on Sunday, Monday and Tuesday from 07.00 hrs onwards.

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**Saturday, June 5**

**08.15** Instructional Course Lecture
New concepts for bone substitution
N. Passuti (F)

**09.15** Break

**09.30** Free Paper Session
Bone grafts/substitutes

- Residual moisture in freeze-dried trabecular bone
  Bitzan P., Katterschafka T., Grampp S., Rendl J., Svolba G. (A)

- Early immune response to frozen, gamma irradiated bone allograft
  Hepple S., Hamer A., Stockley I., Weetman A.P. (UK)

- The use of calcium sulfate pellets to fill post-traumatic osseous defects
  Assimakopoulos A., Dimos I., Anastopoulos G., Papailiou A., Tsoutsanis A. (GR)

- Calcium sulfate: a synthetic bone graft material for grafting a large medullary defect

- An investigational study of calcium sulfate for posterolateral spinal arthrodesis - an in vivo animal model
  Cunningham B.W., Haggerty C.J., Oda I., Fedder I.L., McAfee P.C. (USA)

- Incorporation of 3 different hydroxyapatite ceramics in diaphyseal bone beds - histomorphological studies in sheep’s femur
  Kleihues H.T., Albrecht S., Badke S., Kirgis A., Noack W. (D)

**10.30** Break

**10.30** Break

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**Saturday, June 5**

**08.15** Instructional Course Lecture
Pathology of the tendon of the long head of biceps and the rotator interval
H. Resch (A)

**09.15** Break

**09.30** Free Paper Session
Shoulder impingement

- Quantified impingement measurement of the shoulder
  Plasschaert F., De Wilde L. (B)

- Are there tendencies of degeneration in young supraspinatus tendons caused by subacromial impingement?
  Fuchs S., Schuler A., Blasius S. (D)

- The histological lesions of the tendon stumps in rotator cuff tears
  Postel J.M., Goutallier D., Voisin M.C. (F)

- Cost and efficiency comparison of the arthrocare electrode and electrocautery for arthroscopic subacromial decompression
  Stetson W. (USA)

- Long-term results of arthroscopic vs open debridement in massive rotator cuff tears
  Miehlke W., Schwyer H.K., Simmen B., Fuchs V. (CH)

- Lesions of the rotator cuff of the shoulder associated with axillary palsy
  Prudnikov O.E., Prudnikov E.E., Prudnikov D.O., Leonovets V.M., Kapustinsky A.I. (R)

**10.30** Break
Instructional Course Lecture
Tendon injuries and overuse syndromes
S. Orava (SF)

Break

Free Paper Session
Achilles tendon
- Correlation between intratendinous pressure and vascularisation in the human Achilles tendon
  Stein V., Petersen W., Laprell H., Tillmann B. (D)
- Tenoplasty for chronic Achilles tendinitis
  Roberts S.N.J., Brown J.N., Paterson R.S. (AUS)
- Achilles tendon chronic partial rupture: surgical treatment using half the peroneus brevis tendon as a pedicled graft
  Besse J.L., Moyen B., Lerat J.L. (F)
- Conservative treatment of recent ruptures of Achilles tendon
  Arlettaz Y., Chevalley F., Gremion G., Leyvraz P.-F. (CH)
- Outcome of Achilles tendon injuries - a clinical, ultrasonographic and isokinetic evaluation
  Chillemi C., de Palma L., Gigante A., Verdenelli A., Morgantini A. (I)

Break

Instructional Course Lecture
Diagnosis and treatment of osteoporosis for orthopaedic surgeons
W.A. Wallace (UK)

Break

Free Paper Session
Spine: Miscellaneous
- Analysis of 25 cases of “osteoplastic laminectomy”
  Ijiri S., Tamura K., Kasai R. (J)
- The significance of quantitative morphometry in the assessment of osteoporotic vertebral fractures in males
  Papadimitriou N.G., Kapetanos G., Papadimitriou G., Sayegh F. (GR)
- Functional impairment following graded decompression of the lumbar spine
  Quint U., Wilke H.J., Claes L. (D)
- An aged patient with a vertebral body injury: an algorithm to solve the diagnostic problem
  Mazza E., Verdoia C., Garbagna G.P., Croce A., Mazza M. (I)
- Thoracic spinal canal stenosis: surgical treatment
  Paliotta V.F., Occhionero A., Logroscino C.A. (I)
- Advances in the repair of spinal cord
  Brunelli G.A. (I)

Break
The registration desk of the 4th EFORT Congress will be open on Friday, June 4 from 12.00 till 20.00 hrs and on Sunday, Monday and Tuesday from 07.00 hrs onwards.
14.00 Specialised Symposium
Orthopaedic registers: European standard of everyday practice – a joint responsibility
K.-G. Thorngren (S)

- Knee arthroplasty for osteoarthritis and rheumatoid arthritis – a report from the Swedish national register 1987 – 1996
  Lidgren L. (S)
- Outcomes from the Swedish hip arthroplasty register
  Herberts P. (S)
- Experiences from the Norwegian hip arthroplasty register
  Havelin L.I. (N)
- Organisation of a German arthroplasty register
  Puhl W. (D)
- Standardised audit of hip fractures in Europe (SAHFE)
  Thorngren K.-G. (S)
- European implant register
  Lewalle J. (B)

15.30 Break

14.00 Specialised Symposium
Treatment of extracapsular hip fractures
M. Parker (UK)

- Using the evidence to determine the optimum method of treatment
  Parker M. (UK)
- Indications for the use of the sliding hip screw in extracapsular fracture of the proximal femur
  Santori F.S. (I)
- Experience with the Medoff sliding plate in extracapsular hip fractures
  Ceder L. (S)
- Hip screw with trochanteric stabilizing plate for unstable extracapsular hip fractures
  Alho A. (SF)
- The RAB-plate for unstable trochanteric hip fractures
  Buciuto R. (S)
- Indications for the Gamma and the long Gamma nail in trochanteric fractures and complex fractures of the trochanter-diaphyseal area
  Grosse A. (F)
- Intertrochanteric fractures: endoprosthetic replacement
  Broos P. (B)

15.30 Break
14.00 Specialised Symposium
Does rotation matter in TKR?
M. Freeman (UK)

- Axial tibial rotation in the natural knee
  Freeman M.A.R. (UK)
- Does rotation in TKR affect function?
  Munzinger U. (CH)
- The consequences regarding wear of providing rotation in TKR
  Walker P. (UK)
- Will bearing mobility result in a lower incidence of TKR loosening?
  Lemaire R. (B)

15.30 Break

14.00 Specialised Symposium
Fractures of the distal radius
M.M. McQueen (UK)

- The use of dynamic bridging external fixator in distal radius fractures
  Pennig D. (D)
- Non-bridging external fixation of the wrist
  McQueen M.M. (UK)
- Salvage procedures for multioperated scaphoid nonunion
  Saffar Ph. (F)
- The use of bone substitutes in distal radius fractures
  Kopylov Ph. (S)
- What is new in reflex sympathetic dystrophy?
  van der Laan L. (NL)

15.30 Break
### 14.00 Specialised Symposium
#### Treatment of 3- and 4-part fractures of the proximal humerus
D. Huten (F)

- Arterial blood supply of the proximal humeral epiphysis and anatomical basis of post-traumatic necrosis
  Duparc F. (F)
- Classification of fractures of the upper humerus
  Habermeyer P. (D)
- The non-operative management of 3 & 4 part fractures of the proximal humerus
  Frostick S. (UK)
- Percutaneous pinning in fractures of the proximal humerus
  Soete P. (B)
- Open reduction and internal fixation of complex fractures of the proximal humerus
  Gerber Ch. (CH)
- Post-traumatic necrosis of the humeral head
  Huten D. (F)
- Arthroplasty in fractures of the proximal humerus
  Povacz P. (A)

### 15.30 Break

### 14.00 Specialised Symposium
#### Cartilage repair
R.P. Jakob (CH)

- Cartilage regeneration and repair
  Hunziker E. (CH)
- Documentation of lesion by MRI and at surgery
  Bobic V. (UK)
- Osteochondral grafting in the knee
  Bobic V. (UK)
- Osteochondral grafting outside the knee
  Jakob R.P. (CH)
- Cell therapy
  Peterson L. (S)

### 15.30 Break
14.00 Free Paper Session
Hand surgery: miscellaneous

- Experimental restoration of the neuromuscular continuity
  Villanueva-Lopez F., Psychoyios V., Ditsios K., Kinnas P. (GR)

- The differences in the behavior of healing of intrasynovial and extrasynovial autogenous tendon grafts without pull out suture in rabbits: Preliminary report
  Ditsios K., Kinnas P.A., Dinopoulos H., Psychoyios V., Perru Z. (GR)

- Assessing the prevalence of hand OA in epidemiological studies - The reliability of a new radiological hand score
  Kessler S., Fuchs J., Guenther K.P., Stürmer T., Puhl W. (D)

- Robot-assisted microsurgery: introduction of a new system
  Krapohl B.D., Siemionow M., Siebert W.E. (D & USA)

- Tissue-plasminogen activator prevents muscle flap thrombosis
  Krapohl B.D., Siemionow M., Siebert W.E. (D)

- Bridging nerve defects with biodegradable polyglycolic acid or silicone tubes - a comparative study in rats
  Dinopoulos H., Ditsios C.T., Psychoyios V.N., Perrou Z., Kinnas P.A. (GR)

- Costal cartilage prosthesis in arthroplasty of the first carpometacarpal joint
  Nicoloff M. (D)

- Injection under pressure in the hand: specificity of industrial oil in 1998
  Obert L., Garbuio P., Jeunet L., Lepage D., Tropet Y. (F)

- Amputation of hand and replantation: 8 cases with a follow-up of 10 years
  Obert L., Garbuio P., Corral H.P., Grelet V., Tropet Y. (F)

15.30 Break

14.00 Free Paper Session
High tibial osteotomy

- The high tibial valgus osteotomy - an improved technique
  Kessler O.Ch., Jacob H.A.C., Romero J. (CH)

- Patella Baja following high tibial osteotomy?
  Van den Bogaert G., Geens S., Verheyden F. (B)

- Total knee arthroplasty after opening-wedge osteotomy
  Hernigou Ph., Bassaine M. (F)

- The effect of high tibial osteotomy on subsequent knee replacement
  Waterman J., Haddad F.S., Bentley G. (UK)

- Total knee replacement and tibial or femoral osteotomy in a single step procedure for arthritis associated with severe extra-articular deformities: 11 cases
  Lerat J.-L., Godeneche A., Besse J.-L., Moyen B. (F)

- Prolonged peroneal nerve dysfunction after high tibial osteotomy - Pre and postoperative electrophysiological study

- Intraoperative threshold hunting for monitoring of peroneal nerve function during high tibial osteotomies
  Nebelung W. (D)

15.30 Break
14.00  Free Paper Session
Ankle joint

- Fractures of the foot and ankle in car drivers and passengers - incidence, analysis and long-term results
  Richter M., Therman H., Schratt H.E., Otte D., Tscherne H. (D)
- Displaced ankle fractures in the over 55 years of age - a prospective randomised study
  Makwana N., Bhowal B., Harper A. (UK)
- Ankle fractures in the elderly - is surgical treatment warranted?
  Salai M., Dudkiewitz I., Novikov I., Amit Y., Chechick A. (IL)
- Ankle fusion using retrograde intramedullary nailing
  Piétu G., Gouin F., Letenneur J. (F)
- Ankle arthrodesis - a comparison of open and closed techniques
  Taylor A., Hartley R., Henry A.P.J. (UK)
- Ilizarov ankle arthrodesis as a salvage procedure for intractable neuropathic arthropathy - Report of 5 cases
  De Cloedt P., Lokietek W. (B)
- Clinical and radiological assessment of total ankle joint replacements
  Schenk K., Becker R., Pap G., Neumann H.W. (D)

15.30  Break

14.00  Free Paper Session
Trauma - fractures

- War amputation of the foot
  Muminagic S., Kapidjic T. (BH)
- Effect of a silicone soft socket system on rehabilitation of geriatric transfemoral amputees
  Trieb K., Lang T., Stulnig T., Kickinger W. (A)
- The effect of the Danish governmental plan for prevention of injuries and fatalities related to road traffic accidents is overestimated - comparison of hospital and police based registrations
  Röck N.D., Larsen L.B., Skov O. (DK)
- Can diaphyseal bone and callus be simulated? A biomechanical study
  Giannikas D., Panagiotopoulos E., Kostopoulos V., Lambiris E. (GR)
- Autologous bone marrow for nonunions: the influence of the number of progenitor cells transplanted on healing
  Hernigou Ph., Beaujean F. (F)
- Stimulation of bone formation with an injectable tricalciumphosphate - BMP-2 composite in rats
  Niedhart C., Koch S., Maus U., Redmann E., Niethard F.U. (D)

15.30  Break
15.45 Free Paper Session
THR – femur

- Femur anatomy, computer tomography and computer aided design of prosthetic implants
  Adam F., Lataste J.F., Kohn D. (D)
- Femoral neck preservation in total hip replacement
  Pipino F. (I)
- Cement fracture does not progress to osteolysis
  Crawford R., Ling R. (UK)
- Bone mineral density changes one year following total hip arthroplasty with a cemented double tapered collarless polished stem
  Patel J., Chattoo M., Banks L., Higgins R., Pearse M.F. (UK)
- Measurement of the femora in a Middle-Eastern population: a morphometric study in 114 skeletons as an anatomic basis for femoral component design
- An analysis of fretting damage seen on explanted femoral stems
  Howell J., Ling R.S.M. (UK)

16.45 Break
Free Paper Session
Knee kinematics

- Tibio-femoral movements in the cadaveric and living knee: a study based on MRI and dissection
  Iwaki H., Pinskerova V., Hill P., Freeman M.A.R. (CS)
- 'Dynamic' M.R.I. scanning of the weight-bearing asymptomatic knee-tibio-femoral motion during flexion
  Williams A., Vedi V., Iwaki H., Gedroyc W., Hunt D. (UK)
- 'Dynamic' M.R.I. scanning of the weight-bearing asymptomatic knee-patello-femoral tracking and meniscal motion
  Vedi V., Williams A., Tennant S., Gedroyc W., Hunt D. (UK)
- The evaluation of TKR designs using a simulated walking cycle
  Des Jardins J.D., Walker P.S., Haider H., Perry J. (UK)
- The histological lesions of the cruciate ligament of 52 arthritic knees treated by postero stabilized prosthesis - Correlation with their macroscopic aspects - Interest for the indication of TKR sparing 1 or 2 cruciate ligament
  Goutallier D., Allain J., Voisin M.C., Torres M. (F)
- The posterior cruciate ligament has no proprioceptive function in advanced osteoarthritis - An immunohistochemical study
- Late vs. early engagement of posterior stabilized prostheses: effect on extensor moment arm and resulting patellofemoral loads

Free Paper Session
Distal radius fractures

- Correlation between radiological healing and function after Colles-fractures
  Nyiri P., Süth Z.S., Rupnik J. (H)
- Benefits of Norian SRS, injectable calcium phosphate bone substitute, in the treatment of distal radius fractures
  Kopylov Ph., Tägil M., Aspenberg P. (S)
- Norian SRS for the treatment of distal radius fractures: prospective randomized study
  Sanchez-Sotelo J., Munuera L. (E)
- The value of wrist arthroscopy in distal radius fractures
  Stoffelen D., Broos P. (B)
- The importance of the distal radioulnar joint in distal radial fractures
  Stoffelen D., Broos P. (B)
- Lower incidence of reflex sympathetic dystrophy in wrist fractures after administration of vitamin C
  Zollinger P.E., Tuinebreijer W.E., Kreis R.W., Breederveld R.S. (NL)
- Long-term results of conservative treatment of intraarticular fractures of the distal radius
  Giannikas D., Tyllianakis M., Lambiris E. (GR)

Break
15.45 Free Paper Session
Humerus - fractures

- Results of 45 Marchetti’s nailing for humerus fractures
  Chantelot C., Peltier B., Feugas C., Elkholti K., Fontaine C. (F)
- The Kapandji technique: a minimal invasive treatment
  for proximal humeral fractures
  Werner A.W., Boehm D., Gohlke F. (D)
- Treatment of proximal humerus fracture
  with Prévot nails
  Wachtl S.W., Marti C.B., Hoogewoud H.M., Gautier E.,
  Jakob R.P. (CH)
- Recent fractures of the humeral shaft - Place of plating
  on the medial surface
  Dayez J., Petri J. (F)
- Biological intramedullary osteosynthesis of subcapital
  humerus fractures
  Laminger K.A. (A)

16.45 Break

15.45 Free Paper Session
Osteochondritis dissecans - cartilage

- Antegrade drilling for osteochondritis dissecans of the
  medial condyle of the knee: report of 25 knees
  Katabi M., Beaufils P., Louisia S., Robert H. (F)
- Biological repair of articular cartilage defects in the
  knee joint
  Reissis N., Tzanetos P., Bentley. G. (UK)
- Articular and osseous lesions in recent ligament tears:
  arthroscopic changes compared with MRI and histologic
  findings
  Lahm A., Erggelet C., Steinwachs M., Reichelt A. (D)
- The effect of laser on cartilage vitality: a confocal
  microscopy study
  Weiler C., Mainil-Varlet P., Jakob R.P., Schaffner T.,
  Frenz M. (CH)
- Bone signal modifications following laser arthroscopy
  Saunier J., Kindynis P., Juillerat E. (CH)

16.45 Break
15.45 Free Paper Session  
Joint infection

- A prospective study of the Prostalac functional spacer in two-stage revision for infected total knee replacements  
  Haddad F.S., Masri B.A., Campbell D., Duncan C. (CDN)
- Two-stage reimplantation using individually adapted antibiotic loading of bone cement in infected total knee arthroplasty  
  Kienapfel H., Mutters R., Sprey C., Pfeiffer M., Haake M. (D)
- Arthroscopy in septic arthritis of the knee  
  Albrecht T., Quitmann H., Quint U., Michiels I. (D)
- Hip arthroscopy for treatment of septic arthritis in children  
  Fontana A., Battistella F., Randelli P. (I)
- Pathophysiological parameters of knee joint effusions in absence and presence of infection  
  Cathrein P., Simmen H.P., Blaser J., Romero J. (CH)

16.45 Break

15.45 Free Paper Session  
Femoropatellar joint

- Osteotomy of the dysplastic femoropatellar groove (trochleoplasty)  
  Bereiter H. (CH)
- Trochleoplasty for recurrent femoropatellar dislocation: a study of 72 cases after a mean follow-up of 5 years (2-9)  
  Gougeon F., Remy F., Besson A., Migaud H., Duquennoy A. (F)
- Functional evaluation of the modified Elmslie Trillat procedure for patellofemoral dysfunction  
  Kumar A., Jones S., Bickerstaff D.R., Smith T.W.D. (UK)
- A radiological assessment of the progression of tibiofemoral osteoarthritis following isolated patellofemoral joint replacement  
  Khan S., Newman J., Desai V., Ackroyd C. (UK)

16.45 Break
15.45 Free Paper Session
Ankle sprain

- Contribution of computerized tomodensitometry in the evaluation of foot and ankle sprain
  Vasilevski D., Vanderhofstadt A. (B)

- Results of combined medial and lateral ligament reconstruction in chronic ankle instability
  Trouillier H., Hintermann B. (CH)

- Anatomic reconstruction versus tenodesis for chronic anterolateral instability of the ankle joint: 2 -10 years follow-up - a retrospective multicentre study
  Krips R., van Dijk C.N., Halasi T., Järvinen M. (NL, H & SF)

- Anatomic reconstruction versus tenodesis for chronic anterolateral instability of the ankle joint: 10 - 15 year follow-up - a retrospective multicentre study

- Mini invasive day hospital Brostrom technique in ankle instability
  Canata G.L., De Sanctis L. (I)

16.45 Break

15.45 Free Paper Session
Bone tumour surgery

- Patellar tendon reconstruction in massive tibial replacements

- Pelvis reconstruction after resection of malignant bone tumours using custom-made pelvis prostheses
  Schwameis E., Dominkus M., Krepler P., Windhager R., Kotz R. (A)

- Two stage revisions for infected massive prostheses
  Grimer R., Carter S., Tillman R., Belthur M. (UK)

- Quality of living in long-term survivors of pelvic bone cancer
  Albrecht S., Ritschl P., Salzer M. (D)

- Extensible endoprostheses of the humerus following resection of bone tumours

- Extendible replacements of the tibia in children - a risky business
  Grimer R., Carter S., Tillman R. (UK)

16.45 Break
17.00 Free Paper Session
Cementless THR

- Histopathology of well-functioning hydroxyapatite-coated femoral prostheses after 4 to 7 years
  Hardy D., Frayssinet P., Delince Ph. (B)
- Results with HA-coated hip implants over 10 years of follow-up
  Epinette J.A. (F)
- Uncemented metal on metal (Metasul) total hip arthroplasty: early results after 2-6 years
  Doerig M., Odstrcilik E., Jovanovic M., Kratter R. (CH)
- The Lamella system - An innovative principle of anchorage
  Stühmer K.G. (D)
- Long-term results in cementless hip replacement using the ‘ripped stem and screw-in cup’
  Thabe H., Schill S. (D)
- Cemented and non-cemented hip arthroplasty with a proximal plasma sprayed titanium stem
  Van Der Straeten C., Goossens M., Gruen T.A. (B & USA)

17.00 Free Paper Session
Pelvis - fractures

- Is it necessary to assess radiographic magnification when measuring displacements after pelvic trauma?
  Errors related to non calibrated X-rays in 63 cases
  Peltier B., Chantelot C., Migaud H., Gougeon F., Duquennoy A. (F)
- Percutaneous treatment of pelvic fractures
  Oransky M., Todesca A., Paladino A., De Santis E. (I)
- Peripheral nerve injuries associated with fractures of pelvis and acetabulum - Electromyography study
  Chomiak J., Dungl P., Soukup B., Stedré V. (CS)
- Surgical treatment of unstable pelvic ring injuries
  Katonis P., Christoforakis J., Aligizakis A., Kontakis G., Galanakis J. (GR)
- Unstable pelvic ring fractures (UPRF) in multiple trauma
  Savevski J., Simeonov M., Andonovski Z., Kaftandziev I. (GR)
- Outcome of operatively treated unstable pelvic ring injuries
  Lindahl J., Hirvensalo E. (SF)

Don’t miss the Belgian Night in Hall 12. Participation is free but pre-registration is mandatory. See Page 106
17.00 Free Paper Session
Knee replacement

- Conformity and mobility in knee arthroplasty: a solution to polyethylene wear?
  Argenson J.-N., Aubaniac J.M. (F)
- Polyethylene wear in non-congruous unicompartmental knee replacements: a retrieval analysis
  Desai V., Newman J. (UK)
- Polyethylene wear in a nonconforming meniscal bearing knee prosthesis
  Polyzoides A.J., Tsakonas A., Droulias C., Brooks S. (UK)
- Staged soft tissue releases during total knee replacement in high grade alignment deformities
  Zembsch A., Schmidt W., Ritschl P. (A)
- Selective ligament release in total knee replacement of the valgus knee
  Whiteside L. (USA)
- Value of arthroscopic arthrolysis in total knee arthroplasty
  Henkel Th.R., Tibesku C.O., Munzinger U. (CH)

17.00 Free Paper Session
Elbow: Miscellaneous

- Repair of distal biceps tendon rupture - a new technique using the endobutton
  Verhellen R., Bain G.I., Prem H., Heptinstall R.J., Paix D. (AUS)
- Cervical spine manual therapy does not improve outcome after low-energetic shock wave therapy of chronic lateral epicondylalgia
  Riedel C., Schöllner C., Betz U., Rompe J.D., Heine J. (D)
- Reconstruction of elbow flexion with m. pectoralis in arthrogryposis multiplex congenita type I
  Dungl P., Chomiak J. (CS)
- Symptomatic posterolateral plica synovialis of the elbow
  Henkel Th., Tibesku C., Löhr J., Simmen B., Schwyzer H.K. (CH)
17.00 Free Paper Session
Shoulder

- Developmental changes of the acromion process
  Shah N.N., Bayliss N.C., Malcolm A. (UK)
- The osseous anatomy of glenoids prior to total shoulder replacement
  Nyffeler R.W., Meier R., Gerber C. (CH)
- Stress distribution in osteoarthritic glenohumeral joints
  Farron A., Buechler P., Ramaniraka N., Rakatomanana L., Leyvraz P.F. (CH)
- Incidence of SLAP lesions, labrum lesions and rotator cuff disease in 24 cadaveric shoulders - MR arthrography compared to arthroscopic findings
  Haury J., Öttl G., Imhoff A., Merl T. (D)
- Proprioception in the shoulders of patients before and after arthroscopic labrum repair
  Machner A., Wissel H., Heitmann D., Nebelung W., Pap G. (D)
- Three shoulder scoring system in individuals with normal shoulder function
  Wurnig C., Zehetgruber H., Huber W., Grübl A. (A)
- Quantitative evidence for the spatial development and remodelling of acromial spurs: a cytochemical study
  Chambler A., Pitsillides A.A., Emery R.J.H. (UK)

17.00 Free Paper Session
Vascularised bone grafts

- Osteosynthesis of vascularized bone transfers with special reference to external fixation
  Schuind F., Burny F. (B)
- Bone transplantation by microsurgical techniques in orthopaedic surgery
  Lehner B., Martini A.K., Bernd L. (D)
- Clinical applications and outcome of vascularised bone grafts
- The free vascularized fibular graft in reconstruction of skeletal defects
  Zalavras Ch.G., Malizos K.N., Mavrodontidis A., Beris A., Soucacos P.N. (GR)

Don’t miss the Belgian Night in Hall 12. Participation is free but pre-registration is mandatory. See Page 106
17.00 | Free Paper Session
Bone and joint infection

- MRSA and MRSE infections - an increasing problem in orthopaedic high-risk patients
  Schwameis E., Schnabel B., Krasny C., Aspöck C., Grübl A. (A)
- Immunomodulation in septic implant failure
  Albrecht S., Gill C., Natz P., Lobeck H., Noack W. (D)
- Novel antibiotic carrying biodegradable implant for the treatment of bone infections
  Eksioglu F., Gursel I., Korkusuz F., Hasirci V. (TR)
- Vancomycin graft composite - A new treatment for bone infection
  Winkler H., Berger Ch., Janata O., Georgopoulos A. (A)
- Value of HIG-scans in the diagnostic procedure of musculoskeletal infections
  Brun J., Schmidt B., Luebeck M. (D)
- Clinical relevance of CRP-level as a postoperative parameter for detection of infection
  Tolksdorff E., Ochsner P.E. (CH)

17.00 | Free Paper Session
Knee osteoarthritis

- Computerised measurement of tibio-femoral alignment
- Comparison between monopodal and bipodal full length radiographs
  de Cussac J.B., Gouin F., Collet Th., Sam-Wing J.F., Passuti N. (F)
- The role of femoral torsions and tibial torsions in the occurrence of lateralized femoro-tibial arthrosis
  Allain J., Goutallier D., Garabedian J.M. (F)
- Cartilage changes around a surface stepoff in an unstable knee - a rabbit study
  Lovasz G., Park S.-H., Luck Jr., Belleye A., Benya P. (H & USA)
- Hepatocyte growth factor in osteoarthritic cartilage
  Pfander D., Swoboda B., Pullig O., Weseloh G. (D)
- Results of arthroscopic surgery in several stages of osteoarthritis of the knee joint
  Krüger Th., Decker Th., Birke A., Hein W. (D)
Free Paper Session

Ankle - fractures

- Comparison of the outcome of tibial pilon fractures treated with open reduction and internal fixation vs. external fixation
  Fialka Ch. (A), Ehteshami J.R. (USA), Bockhorn G. (A), Matis N. (A), Maier R. (A)

- Early weight-bearing following ORIF of posterior malleolar fractures of the ankle joint
  Papachristou G., Levidiotis C., Tilentzoglou A., Efstathopoulos N. (GR)

- Articular fractures of the tibia (pilon) grade III - Treatment with external fixator and minimal internal fixation
  Evangelopoylos D. (GR)

- Fractures of the tibial plafond: influence of fractures type and accuracy of articular reduction in their prognosis

- Results of surgical treatment of displaced pilon fractures
  Stojkovska E., Savski J., Todorov I., Velkovski G., Andonovski Z. (MAC)

- Minimally invasive treatment for ankle fractures associated with severe soft tissue injury
  Dendrinos G., Anastopoulos G., Kontos S. (GR)

Free Paper Session

Bone imaging

- Digital image analysis: improving accuracy and reproducibility of radiographic measurement
  Bould M., Barnard S., Hardy J.R.W. (UK)

- Comparison of conventional and digital radiography - An experimental radiostereometry (RSA)-examination
  Ishaque N., Sprey Ch., Kienapfel H. (UK)

- Short-term clinical and radiological outcome of bone bruising identified on magnetic resonance imaging of the acutely injured knee
  Niall D., Davaies N.H., King L.J., Lavelle J., Healy C.J. (UK)

- Patterns of bone bruising in magnetic resonance imaging of the acutely injured knee
  Davies N.H., Niall D., King L.J., Lavelle J., Healy J.C. (UK)
SPECIALTY DAY – Sunday – Programme at a glance

**Room 1**
- **MORNING**
  - EPOS
    - European Paediatric Orthopaedic Society

**Room 2**
- **MORNING**
  - EFAS
    - European Foot and Ankle Societies

**Room 3**
- **MORNING**
  - EHS
    - European Hip Society

**Room 4**
- **MORNING**
  - FESSH
    - Federation of the European Societies for Surgery of the Hand

**Room 5**
- **MORNING**
  - ESSSE
    - European Society for Surgery of the Shoulder and the Elbow

**Room 6**
- **MORNING**
  - EFORT & ESSKA
    - European Society of Sports Traumatology, Knee Surgery and Arthroscopy

**Workshops and Satellite Symposiums by the Industry**

**Room 1**
- **AFTERNOON**
  - EPOS
    - European Paediatric Orthopaedic Society

**Room 2**
- **AFTERNOON**
  - EFAS & EBJIS
    - European Bone and Joint Infection Society

**Room 3**
- **AFTERNOON**
  - EHS
    - European Hip Society

**Room 4**
- **AFTERNOON**
  - ESSSE
    - European Society for Surgery of the Shoulder and the Elbow

**Room 5**
- **AFTERNOON**
  - EFORT & ESSKA
    - European Federation of Orthopaedic Sports Traumatology

**Room 6**
- **AFTERNOON**
  - EFORT & ESSKA
    - European Federation of Orthopaedic Sports Traumatology

**EFORT**
**Banquet at Autoworld**

All recent information on the EFORT Congress as well as registration forms can be found on the INTERNET at:
- http://www.medicongress.com
- http://www.efort.org
- http://www.belgianorthoweb.be/efort
Sunday, June 6 – Specialty Day

June 3 – 8, 1999
Brussels

E F O R T

4th Congress of the European Federation of National Associations of Orthopaedics and Traumatology
Session I: Lower limb fractures and dislocations in children

CHAIRMAN: W. LOKIETEK

08.30 Obstetrical injuries to the lower limbs
   J. Dimitriou

08.45 Pelvic fractures
   V. Bialik

09.00 Traumatic dislocation of the hip
   M. Bergoin

09.15 Discussion

09.25 Modern trends in internal fixation of shaft fractures of the lower limbs
   K. Parsch

09.45 External fixation of shaft fractures of the lower limbs
   N. de Sanctis

10.05 Discussion

10.15 Break

CHAIRMAN: H. BENSAHEL

10.45 Fractures around the knee
   U. Exner

11.00 Triplane fractures of the ankle
   J. Kärrholm

11.15 Fractures of the foot
   E. Lamprecht

11.30 Bone remodelling in malunited fractures of the lower extremities
   J. de Pablos

11.45 Discussion

12.00 Lunch Break

Session II: Update on Legg Calvé Perthes disease

CHAIRMAN: K. PARSCH

13.30 State of the art on Legg Calvé Perthes
   A. Catterall

13.50 A critical view on the different classification systems
   M. Synder

14.05 Respective value of different imaging methods
   H. Bensahel

14.25 The use of MRI
   N. de Sanctis

14.45 Discussion

14.55 Break

CHAIRMAN: J. VAN DER EIJKEN

15.25 Legg Calvé Perthes under 5 years of age.
   Stulberg classification revisited
   A. Dimeglio

15.40 Legg Calvé Perthes over 9 years of age
   P. Moens

15.50 Bilateral disease, different from unilateral?
   G. Fabry

16.00 Recurrent disease
   B. Heimkes

16.10 Discussion

16.20 Late deformities and indication for treatment
   D. Kerret

16.35 Osteotomies around the hip: indications, pitfalls and results
   G. Hanson

16.50 Long-term follow-up
   M. Poussa

17.05 Discussion

17.15 Case presentation and discussion
   A. Catterall

17.30 Adjourn
EFAS

**MORNING SESSION: RHEUMATOID FOOT**

**Moderator:** Prof. Dr. F. Malherba – Dr. R. Wildhalm

- **08.30** Etiology – Pathophysiology and current trends in the medical treatment
  Dr. Westhovens (B)

- **08.45** Conservative orthopedic treatment
  Prof. Dr. Weseloh (D)

- **09.00** Surgical treatment of the forefoot. State-of-the-art
  Prof. Dr. S. Sell (D)

- **09.15** Arthrodesis versus ankle prosthesis
  Dr. Kofoed (DK)

- **09.30** Treatment of tendon pathology in the hindfoot
  PD. Dr. Hintermann (CH)

- **09.45** Panel discussion

**Free Papers: FOREFOOT DISORDERS**

- **Metatarsalgia**
  **Moderator:** Dr. E. Dounis, Dr. J. W. Louwerens
  - Evaluation of the transverse metatarsal arch of the foot with gait analysis
    Kanatli Y., Yetkin H., Simsek A., Keser S., Guzel V. (TR)
  - Long-term follow-up of Helal’s telescoping metatarsal osteotomy
    Mersich I., Perlaky G.Y., Bense A., Matyus B., Novotni D. (H)
  - The Weil osteotomy of the lesser metatarsal neck: a pedodynographic study
    Vandeputte G., Steenwerckx A., Peeraer L., Dereymaeker G. (B)
  - Regnauld procedure in the surgical treatment of metatarsalgia: interpretation of follow-up x-ray imaging
    de Palma L., Gigante A., Chillemi C., Ventura A. (I)
  - Weil procedure in the treatment of metatarsalgia
    Walpert J., Frank D., Stock Th. (D)

- **Hallux valgus**
  **Moderator:** Dr. M. Stephens, Dr. P. Magro
  - Distal soft tissue procedure and proximal closing wedge metatarsal osteotomy in the treatment of hallux valgus deformity
    Walpert J., Frank D., Stock. (D)
  - Basal metatarsal osteotomy and Keller’s arthroplasty for correction of hallux valgus: comparison of long-term results in the young and active patient
    Zembsch A., Trnka H.-J., Ritschl P. (A)
  - Moderate hallux valgus deformities: Proximal or distal metatarsal osteotomy ?
    Zettl R., Trnka H.-J., Ritschl P. (A)
  - Chevron Akin double osteotomy for the correction of hallux valgus after the age of 60 years. A ten years follow-up
    Diebold P.F., Daum B., Litchinko M. (F)
  - Meyer-Scarf Z osteotomy / Bunionectomy: 15 year long-term follow-up
    Gudas J., Charles D.P.M., Monachino P. (USA)
  - A new distal osteotomy of the first metatarsal for moderate and severe hallux valgus with a new internal fixation technique. Results of the procedure
    Stoffella R. (A)
  - Surgical treatment of hallux valgus: limits of day surgery
    Udin B., Blanc Cl.-H. (CH)
  - Ankle Block: Patient concerns and comfort
    Kelly A., Dracopoulos G., Rudkin G. (Aus)

**Discussion**

**Break**

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**Sunday, June 6**

**room 2**

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**EFAS**

**EUROPEAN FOOT AND ANKLE SOCIETY**
Hallux rigidus
Moderator: Dr. R. Rochera, Dr. P. Agren

- Allogrithm in the surgical treatment of hallux rigidus
  Giannini S. (I)

- First metatarsophalangeal joint arthroplasty with the Swanson double-stem silastic implant – a five to ten year follow-up study
  Bankes M.J.K., Shah R.R., Grace D.L. (UK)

- Extension osteotomy – a good operation for hallux rigidus
  Rees R., Hartley R.H., Henry A.P.J. (UK)

- Treatment of the hallux rigidus with double-stem silicone implants with grommets
  Thienpont E., De Wachter A., Dereymaeker G. (B)

- Long-term results of first metatarsophalangeal joint fusion
  Agoropoulos Z., Estathopoulos N., Kokorogiannis C., Karras K., Papachristou G. (Gr)

- The results of percutaneous fusion of the first metatarsophalangeal joint
  Hopgood P.J., Paul A. (UK)

- Titanium hemi-arthroplasty of the first metatarsophalangeal joint
  Chaudry A.G., Aldadah Q., Tait G.R., FitzGerald B. (UK)

Discussion

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AFTERNOON SESSION: DIABETIC FOOT
COMBINED SESSION of the EUROPEAN FOOT AND ANKLE SOCIETY and EUROPEAN BONE AND JOINT INFECTION SOCIETY

Moderator: Dr. G. Walenkamp – Dr. H. Kuster

- 14.00 Pathophysiology – Diagnosis of the diabetic foot
  Prof. Dr. N. Schaper (NL)

- 14.15 Biomechanics – gait analysis
  Dr. A Boulton (UK)

- 14.30 State-of-the-art in the treatment of the diabetic foot
  Dr. Schäfer (CH)

- 14.45 Antibiotic treatment
  Prof. Dr. P. Norman (UK)

- 15.00 Surgical treatment of the infected diabetic foot
  Dr. J. Stuyck (B)

- 15.15 Salvage procedures to save the diabetic foot
  Minor amputations and functional bracing
  Prof. Dr. R. Baumgartner (CH)

- 15.30 Treatment of the Charcot foot
  Dr. P. Agren (S)

- 15.45 Discussion

- 16.00 Break

- 16.20 Euroforum on the diabetic foot
  Moderator: Prof Dr. G. Dereymaeker

  - “Who cares for the diabetic foot and how?”
    Multidisciplinary approach

  - Role of the endocrinologist, paramedicals, podologists, nurses, orthopaedic schoemakers

  - Presentation by the delegates of the different European countries

  - Panel discussion: Can we achieve a general European consensus?
Free papers: HINDFOOT DISORDERS

Moderator: Dr. B. Hintermann, Dr. P. Diebold

- Multiple (high-energy) injuries to the foot
  Siakadaris P., Deimedes G., Piotopoulos A., Lochovitis C., Apergis E. (Gr)

- Fractures of the foot and ankle in car drivers and passengers – incidence analysis and long-term results
  Richter M., Thermann H., Schratth E., Otte D., Tscherne H. (D)

- Ankle fusion using retrograde intramedullary nailing
  Piétu G., Gouin F., Letenneur J. (F)

- Conservative treatment of recently ruptured Achilles tendon
  Arlettaz Y., Chevalley F., Gremion G., Leyvraz P.-F. (CH)

- Outcome of Achilles tendon injuries: clinical, ultrasonographic and isokinetic evaluation
  Chillemi C., de Palma L., Gigante A., Verdenelli A., Morgantini A. (I)

- Anatomic reconstruction versus tenodesis for chronic anterolateral instability of the ankle joint: 2-10 years follow-up – a retrospective multicenter study
  Krips R., van Dijk C.N., Farkas T., Halasi T., Järvinen M. (SF)

- Mini invasive day hospital Bostrom technique in ankle instability
  Canata G.L., De Sanctis L. (I)

- Results of combined medial and lateral ligament reconstruction in chronic ankle instability
  Trouillier H., Hintermann B. (CH)

- Extracorporeal shock wave therapy for plantar heel pain
  Schoellner C., Riedel C., Schwitalle M., Rompe J.D., Heine J. (D)

Discussion

EHS (09.30 – 17.00)

- Symposium: Labral lesions of the hip
  Convenors: Siegfried Hofmann and Christian Tschauer (Austria) with R. Ganz (Switzerland) and R. Villar (UK)

- Lecture: Plastic contributions to hip surgery
  V. Heppert (Germany)

- Lecture: Paediatric hip contributions to adult hip surgery
  A. Catterall (UK)

- Lecture: Update on European Hip Register
  J. Lewalle (Belgium)

- Annual General Meeting (members of EHS only)

- Lunch Break

- Symposium: Current concepts of Bulk and Particulate Allograft
  Convenor: Heinz Winkler (EAMST)

  Theory and practice
  Morselised graft
  Bulk allograft

- Symposium: Management of severe femoral bone loss without bone grafting
  Convenor – Jacques Witvoet

  Upper femoral intramedullary replacement
  Femoral uncemented replacement
  Total femur replacement and saddle prostheses

EHS European Hip Society
FESSH
Federation of European Societies for Surgery of the Hand

Sunday, June 6

10.30
10.45
10.55

Comparison of orthopaedic and operative treatments
M. Rooze (Brussels, Belgium)

Prediction of instability of fractures of the distal radius
M. McQueen (Edinburgh, UK)

Classification of distal radial fractures
D. Stoffelen, P. Broos (Leuven, Belgium)

11.10
11.20
11.30

Posttraumatic reflex sympathetic dystrophy and pseudodystrophy
M. Driessens (Edegem, Belgium)

Evaluation and treatment of associated carpal ligament injuries with fractures of the distal radius
Ph. Safar (Paris, France)

11.40
11.50
12.00

Arum pins as intra-focal pinning
A. Kapandji (Longjumeau, France)

Ruptures of the extensor pollicis longus
L. De Smet (Leuven, Belgium)

Sauvé Kapandji procedure
L. Clarabos, P. Ducambois, F. Van Imms (Charleroi, Belgium)

12.10
12.20

Discussion

Anterior plating for Barton fractures
P. Broos (Leuven, Belgium)

Corrective osteotomies of the distal radius
D. Fernandez (Berne, Switzerland)

Posttraumatic reflex sympathetic dystrophy and pseudodystrophy
M. Driessens (Edegem, Belgium)

Discussion

The treatment of the distal radius fractures with "Arum" pins as intra-focal pinning
A. Kapandji (Longjumeau, France)

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Discussion
ESSSE (SECEC)

SHOULDER ARTHROSCOPY

08.30 Welcome address
O. Sneppen, EFORT President, ESSSE Past President, Aarhus (DK),
S. Copeland, ESSSE President, Reading (UK)

• Introduction
D.F. Gazielly, Chairman, Saint Etienne (F)

Session 1: HOW I DO AN ACROMIOPLASTY
08.40 D.F. Gazielly, Saint Etienne (F)
08.55 Moderator: S. Copeland, Reading (UK)
09.10 Discussion

Session 2: HOW I TREAT CALCIFYING TENDINITIS
09.20 D. Molé, Nancy (F)
09.35 Moderator: F. Handelberg, Brussels (B)
09.50 Discussion

Session 3: HOW I TREAT SHOULDER STIFFNESS
10.00 J.P. Warner, Boston (USA)
10.15 Moderator: C. Gerber, Zurich (CH)
10.30 Discussion

10.40 Break

Session 4: HOW I REPAIR A FULL-THICKNESS ROTATOR CUFT TEAR
11.00 P. Habermeyer, Heidelberg (D)
11.15 Moderator: J.P. Warner, Boston (USA)
11.30 Discussion

Session 5: HOW I TREAT A MASSIVE AND IRREPARABLE CUFT TEAR
11.40 G. Walch, Lyon (F)
11.55 Moderator: R. Emery, London (UK)
12.10 Discussion

12.30 Lunch Break

Session 6: HOW I DO RESECTION OF THE LATERAL PART OF THE CLAVICLE
13.00 G. Declercq, Antwerpen (B)
13.15 Moderator: R. Minola, Milano (I)
13.30 Discussion

Session 7: HOW I TREAT SLAP LESIONS
13.40 J.F. Kempf, Strasbourg (F)
13.55 Moderator: A. Castagna Milano (I)
14.10 Discussion

14.20 Break

Session 8: HOW I TREAT ANTERIOR CHRONIC POST-TRAUMATIC SHOULDER INSTABILITY
14.40 D.F. Gazielly, Saint Etienne (F)
14.55 P. Gleyze, Colmar (F)
15.10 H. Resch, Salzburg (A)
15.30 Moderator: J.P. Warner, Boston (USA)
15.45 Discussion

CONCLUSIONS
16.45 D.F. Gazielly, Saint Etienne (F)
State-of-the-art in ACL pathology, treatment and rehabilitation

First session

09.00 Prevention of ACL injuries
H. Pässler (D)

09.15 Conservative approach to ACL injuries
K.P. Benedetto (A)

09.30 ACL injuries in children and adolescents
P. Aichroth (UK)

Second session A: Quality enhancement techniques

09.50 Precision gain of guide pin placement in ACL reconstruction - arthroscopic technique and fluoroscopic assistance
H.U. Stäubli (CH)

10.05 Improved repeatability of ACL graft placement with computer-assisted tunnel localization
B.V.S. Klos (NL)

10.20 Break

Second session B: Long-term results

11.00 Prospective study comparing BTB and semi-T techniques
P. Aglietti (I)

11.15 Long-term results (25 years) of ACL replacement techniques (autografts)
Ph. Neyret (F)

11.30 Long-term results of allografts
R. Verdonk (B)

Current concepts of muscle problems in sports

14.00 Muscle problems in sports - an overview
Lars Engebretsen (N)

14.10 Muscle injury pathophysiology
Dieter Kohn (D)

14.25 Imaging techniques in muscle injuries
Pantelis Nicolao (GR)

14.40 Acute muscle compartment injuries
José M. Villarubias (E)

14.55 Break

15.30 Quadriceps contusion
Dimiter Shoilev (BG), Mahmut Nedime Doral (TR)

16.00 Conservative treatment of muscle injuries
Roland M. Biedert (CH)

16.15 Surgical treatment of muscle injuries
Jean-Claude Imbert (F)
Important

Please note that registration for the EORS Congress closes on April 30, 1999.
Applications received after this date will not be handled and will have to be resubmitted at the on-site registration desk of the Congress.

General Information

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<th>Registration and Fees (in BEF)</th>
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Registration includes
- Participation in the Specialty Society Congress and the documents.
- Local Public Transport Pass giving access to all local public transport free of charge during the EORS Congress days.

Venue and Address
Brussels International Conference Centre – BICC (Heizel)
Belgiëplein - Place de la Belgique, B-1020 Brussels

Organising Secretariat
MEDICONGRESS
Waalpoel 28/34
B-9960 Assenede
Phone  +32 (0)9 344 39 59
Fax    +32 (0)9 344 40 10
Email congresses@medicongress.com

Direct Lines during the Congress
Phone  +32 (0)2 474 85 07
Fax    +32 (0)2 474 82 07

Payment by
- Eurocheque in BEF payable to the 4th EFORT Congress
- Amexco – Visa – Eurocard - Diners
- Bank transfer
  - account number: 001-3165587-68
  - swift number: CGAK BE BB
  - holder of account: 4th EFORT Congress
  - ASLK Bank, Wolvengracht 48, 1000 Brussels,

All money transfers must be free of charges to the receiver.

Confirmation
Acknowldegment of registration and of receipt of payment will only be sent when both the registration form and payment in full are received. A free local public transport pass and a Sabena reduction voucher will be mailed together with the confirmation of registration.

Cancellation
In order to have the registration fee refunded, save 1,000 BEF to cover administration costs, cancellations are to be confirmed in writing to Medicongress. Cancellations are accepted until April 30. For cancellations received after April 30, no refunds can be done. All refunds are settled after the Congress. Participants can have a colleague replace them at any time at a fee of only 500 BEF.

Important

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<td>SS: Lumbar intervertebral cages</td>
<td>SS: Anterior shoulder instability: the bony Bankart lesion</td>
<td>SS: Classifications of idiopathic scoliosis and their value for instrumentation patterns</td>
<td>SS: Fractures and nonunion of the scaphoid bone</td>
<td>FPS: Cementless THR</td>
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EFORT

4th Congress of the European Federation of National Associations of Orthopaedics and Traumatology

June 3 - 8, 1999
Brussels

Monday, June 7
08.15  Instructional Course Lecture  
Biology of prosthetic loosening in the hip  
H.-G. Willert (D)

09.15  Break

09.30  Free Paper Session  
Basic knowledge on THR

- Detection of the aerosol cloud produced by ROBODOC's high-speed bone burr - a contamination risk for the surgical team?  
  Nogler M., Wimmer C., Lass-Flörl C., Mayr E., Stöckl B. (A)
- Osteoblast proliferation and differentiation are modulated by chemical composition and molecular weight of ultrahigh molecular weight polyethylene (UHMWPE) particles in vitro  
  Lohmann C.H., Schwartz Z., Koster G., Casasola D., Dean D.D. (USA)
- Effect of surface roughness of biomaterials used in orthopaedic surgery on human osteoblast response  
  Despinna D., Korovessis P., Katsala N., Missrlis Y., Baikousis A. (GR)
- Initial stability of press-fit implanted cups - In vitro levering-out trials  
  Kuhn A., Scheller G., Schwarz M. (D)
- In vivo diffusion of synovial fluid components into prosthetic UHMWPE  
  Costa L., Crova M., Gallinaro P. (I)
- Histology of the acetabular bone: the influence of radiological diagnosis, operating technique and age on the stability of the implanted cup  
  Schafroth M., Ochsner P. (CH)
- The effect of neck and cup geometry on impingement and range of motion

The registration desk of the 4th EFORT Congress will be open on Friday, June 4 from 12.00 till 20.00 hrs and on Sunday, Monday and Tuesday from 07.00 hrs onwards.
08.15 Instructional Course Lecture
Basic kinematics of knee stability
A. Amis (UK)

09.15 Break

09.30 Free Paper Session
Anterior cruciate ligament

• The biomechanics of a new bone-patellar tendon-bone graft interference fixation device
  Seitz H., Vécsei V., Pichl W., Menth-Chiari W. (A)

• Patellar tendon healing after removal of its central third
  Milano G., Fabbriciani C., Carta G., Brandano A., Falchi M. (I)

• The patellar tendon bone graft is stronger than previously published
  Müllner Th., Reihsner R., Kwasny O., Schabus R., Vécsei V. (A)

• Biocompatibility of a bioabsorbable interference screw until total resorption in a functional sheep model
  Fayard J.-Ph., Chambat P., Christel P., Eloy R., Therin M. (F)

• Clinical and radiological assessment of absorbable screws for ACL reconstruction - Analysis of randomized prospective study in 50 patients
  Imbert J.C., Dupré La Tour L., Montagnon D., Imbert P. (F)

• The incidence of MRI proven deep-vein thrombosis in endoscopic anterior cruciate ligament reconstruction
  Marlovits S., Stocker R., Zontsich T., Trattnig S., Vécsei V. (A)

10.30 Break

08.15 Instructional Course Lecture
Management of malignant soft tissue tumours
A. Taminiau (NL)

09.15 Break

09.30 Free Paper Session
Bone tumours: diagnosis

• Value of Positron-Emission-Tomography (PET) in the diagnosis of musculoskeletal tumors
  Niggemeyer O., Bruns J., Schlueter B., de Wit M. (D)

• Serum antibodies against the heat shock protein 60 are elevated in patients with osteosarcoma
  Trieb K. (A)

• DNA-cytophotometry in the prediction of the biologic behaviour of giant cell tumour (GCT) of bone
  Antal I., Sápi Z., Szendrői M. (H)

• Malignant transformation in MHE: report of a large kindred
  Kivioja A., Ervasti H., Kinnunen J., Kaitila I., Böhling T. (SF)

10.30 Break

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**Monday, June 7, room 5**

08.15 Instructional Course Lecture  
Indications for surgery in cerebral palsy  
M. Guillaumat (F)

09.15 Break

09.30 Free Paper Session  
Paediatric Orthopaedics: Miscellaneous

- Rotational profile of lower extremities in bladder extrophy patients with unapproximated pelvis  
  Yazici M. (TR)
- Complications of long bone lengthening  
  Poul J. (CS)
- Complications after Bailey-Rodding in patients with osteogenesis imperfecta  
  Mazzotti I., Jerosch J., Tomasevic M. (D)
- Surgical treatment of severe fibular hemimelia including the Ilizarov technique  
  Nehrer S., Schiessel A., Kotz R. (A)
- Deep venous thrombosis in 33 pediatric patients  
  Green D.W., Reynolds R., Skaggs D., Tolo V. (USA)

10.30 Break

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**Monday, June 7, room 6**

08.15 Instructional Course Lecture  
Limited invasive surgery of the lumbar spine  
C. Bünger (DK)

09.15 Break

09.30 Free Paper Session  
Pedicular screws

- A new index to improve the accuracy of pedicle screw insertion  
  Kosay C., Berk H., Gul O., Alici E. (TR)
- Computer assisted pedicle screw placement  
  Merloz Ph., Tonetti J., Fontanel F., Troccaz J., Pittet L. (F)
- Comparative accuracy between conventional and computer-assisted pedicle screw installation  
  Amiot L.-Ph., Lang K., Putzier M., Zippel H., De Guise J (CDN & D)
- The effect of pedicle screw instrumentation on lordosis in lumbar spinal fusion  
  Korsgaard M., Christensen F.B., Thomsen K., Hansen E.S., Bünger C. (DK)
- Suprafascial pedicle screw stabilization of anterior lumbar interbody fusion: operative technique and early results  
  Mineiro J., Fernandes P., Reis J., Barroso L., Gomes A.R. (P)
- Posterior screw fixation in cervical cadaveric spines: insertional torque as a function of screw location, bone mineral density and repeated biomechanical stability tests  
  Papagelopoulos P., Currier B., Berglund L., Larson D., An K. (USA)

10.30 Break
Monday, June 7

08.15 Instructional Course Lecture
Disorders of the distal radio-ulnar joint
D. Fernandez (CH)

09.15 Break

09.30 Free Paper Session
Hand/Wrist

- Experience with a hinged total endoprosthetic replacement of the metacarpophalangeal joints in the rheumatoid hand
  Radmer S., Andresen R., Sparmann M. (D)
- Reconstructive arthroplasty of the wrist with a new prosthesis in patients with rheumatoid arthritis
  Radmer S., Andresen R., Sparmann M. (D)
- Kapandji-Sauvé procedure versus Darrach operation in patients with rheumatoid arthritis
  Moehlen S. (D)
- A new wrist prosthesis for reconstructive surgery in R.A.
  Thabe H., Schill S., Biehl C. (D)
- Long-term results and loosening analysis of de La Caffinière replacements of the trapeziometacarpal joint
  van Cappelle H.G.J., Elzenga P., van Horn J.R. (NL)

10.30 Break

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Monday, June 7

09.15 Free Paper Session: Shoulder calcifications
- Extracorporal shock wave therapy in the treatment of chronically painful calcifying tendinitis of the rotator cuff
  Seil R., Rupp S., EnBlin S., Gebhardt T., Kohn D. (D)
- Treatment of tendinosis calcarea and impingement by extracorporal shock wave therapy (ESWT)
  Labek G., Auersperg V., Böhlter N. (A)
- Clinical and radiological results after shock wave application to tendinitis calcarea of the shoulder
  Maier M., Koehler S., Staupendahl D., Pfahler M., Reifor H.J. (D)
- Prospective comparison of shock wave therapy and needling in calcareous tendinitis of the shoulder
  Buch M., Klatt J., Träger D., Siebert W. (D)
- Treatment of snapping scapula syndrome with correction of muscle imbalances
  Sinopidis C.T., Gibson J.C., Frostick S.P. (UK)

09.30 Free Paper Session: Elbow - trauma
- Correction of cubitus varus by French or dome osteotomy: a prospective randomised study
  Kumar K., Sharma V.K., Sharma R., Maffulli N. (UK)
- Results after posterolateral elbow dislocation related to valgus instability
  Eygendaal D., Verdegaal S.H.M., Obermann W.M., van Vught A.B., Rozing P.M. (NL)
- The early motion fixator concept for treatment of acute unstable fracture dislocations of the elbow
  Gausepohl T., Penning D., Mader K. (D)
- Results of treatment of missed Monteggia fractures
  Verboom W.S.W., Besselaar P.P., Schaap G.R., Bollen S.M., van der Zwan A.L. (NL)
- Displaced radial head fractures: resection or osteosynthesis?
  Schuind F. (B)
- The floating prosthesis in the treatment of unstable fracture-dislocation of the elbow
  Popovic N., Gillet Ph., Lemaire R., Rodriguez A. (B)

10.30 Break

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10.45 Belgian Session

- Osteocyte apoptosis and bone remodeling
  Verborgt O.
  Universitaire Instelling Antwerpen (UIA)

- Viable meniscal allografts – 54 cases with a 1 to 8.7 year follow-up
  Verdonk R.
  Rijksuniversiteit Gent (RUG)

- Evaluation of the shock absorption by metallic Moore prostheses compared with bipolar prostheses
  Fabeck L.
  Université Libre de Bruxelles (ULB)

- The stemless Louvain hip prosthesis
  Munting E.
  Université Catholique de Louvain (UCL)

- Roentgen stereophogrammetric analysis (RSA) in knee arthroplasty
  Bellemans J.
  Katholieke Universiteit Leuven (KUL)

- Digital image analysis as a tool for radiological evaluation in orthopaedics and trauma surgery
  Lemaire R.
  Université de Liège (ULg)

- Ankle joint stability: 15 years research experience
  Vaes P.
  Vrije Universiteit Brussel (VUB)

12.00 Lunch Break
14.00 Specialised Symposium
The cemented stem in primary THR
Ph. Hernigou (F)
- Metal-metal pairing: experience from 1988 to 1997
  Weber B.G. (CH)
- The bone vacuum cementing technique for the reduction of the risk of fat embolism and pulmonary impairment during total hip arthroplasty
  Pittro R.P. (D)
- Characterisation of a cement mantle defect leading to accelerated prosthetic subsidence
  McCaskie A. (UK)
- The importance of cementing technique for quality of total hip replacement
  Herberts P. (S)
- Twenty years experience with the cemented smooth titanium-alloy stem Ceraver Osteal in primary cases
  Hernigou Ph. (F)
- The 'taper-slip' principle applied to the cemented femoral stem
  Ling R.S.M. (UK)

15.30 Break

14.00 Specialised Symposium
Paediatric trauma affecting the physis
J. Dimitriou (GR)
- Introduction: Paediatric trauma affecting the physis (growth plate)
  Dimitriou J.K. (GR)
- The role of the growth plate (physis): normal growth
  Krauspe R. (D)
- Evaluation of the injured physis
  Fabry G. (B)
- Fractures of the skeleton involving the physis
  de Pablos J. (E)
- Correction of partial growth plate closure
  Bollini G. (F)
- Regeneration of the growth plate: theoretical considerations
  Österman K. (SF)

15.30 Break
14.00 Specialised Symposium
Lumbar intervertebral cages
P. Varga (H)

• Posterior lumbar interbody fusion: the evolution of ventral support and grafting
  Varga P.P. (H)
• Biomechanics of interbody cages – a state-of-the-art summary
  Oxland Th.R. (CDN)
• Compressive loading affects the stabilisation provided by lumbar interbody cage
  Hoffer Z. (H)
• The yield strength as the most important biomechanical parameter for cage design
  Arnoe M.F.D.M. (NL)
• An in-vitro biomechanical analysis on the stability and stress-shielding effect of interbody fusion implants
  Cunningham B.W. (USA)
• Surgical treatment of degenerative lumbar spine instabilities in 49 cases
  Meisel H.-J. (D)
• Use of minimal posterolateral arthrodesis in the degenerative lumbar spine
  Ganem F. (F)
• Possibilities for endoscopic placement of cages on the different spine segments
  Hovorka I. (F)
• Comparative mechanical testing of different ceramic implants for lumbar interbody fusion
  Placzek R. (D)

15.30 Break

14.00 Specialised Symposium
Anterior shoulder instability: the bony Bankart lesion
P. Habermeyer (D)

Part I: Primary anterior glenoid rim fracture
• Pathology of dislocated Bankart fracture: experimental and clinical aspects
  Gerber C. (CH)
• Functional and radiological results of open reduction and internal fixation of anterior glenoid rim fractures
  Wiedemann E. (D)
• Indication for arthroscopic stabilisation?
  Lafosse L. (F)

Part II: Osseous rim lesions in chronic anterior instability
• The Latarjet-Patte procedure
  Walch G. (F)
• J-shaped bone graft technique
  Resch H. (A)
• Capsulolabral tissue repair for loss of glenoid concavity in chronic anterior instability
  Habermeyer P. (D)

15.30 Break
14.00 Specialised Symposium
Classifications of idiopathic scoliosis and their value for instrumentation patterns
M. Krismer (A)

- Introduction to the Symposium
Krismer M. (A)
- 2D classification for treatment patterns of a 3D deformity
Villanueva C. (E)
- Assessment of the deformities in idiopathic scoliosis
Grob D. (CH)
- Spine deformity: choice of fusion levels – factors and problems causing variation and unplanned changes
Saraste H. (S)
- Strategy for correction of flexible idiopathic scoliosis
Passuti N. (F)

15.30 Break

14.00 Specialised Symposium
Fractures and nonunion of the scaphoid bone
L. De Smet (B)

- Treatment of acute fractures
Davies T. (UK)
- Radiology of fractures and nonunions
Brys P. (B)
- Fractures of the scaphoid in children
Haentjens P. (B)
- Palliative surgery in scaphoid nonunion with degenerative arthritis
Foucher G. (F)
- Treatment of scaphoid nonunion
Saffar Ph. (F)

15.30 Break
14.00 Free Paper Session
Cementless THR

- Development, experience and follow-up with the thrust plate
  Bereiter H., Huggler A.H., Jacob H.A.C. (CH)
- Ten year results of the cementless Spotorno stem migration and survival
  Stoeckl B., Nogler M., Krismer M., Biedermann R., Wimmer C. (A)
- The CLS uncemented stem: 15 years follow-up results
  Grüen T., Spotorno L., Grappiolo G., Romagnoli S. (I)
- Bone-metal interface and bone architecture around non-cemented CLS femoral stems
  Schenk R. (CH)
- Minimum 10 year results following alloclassic acetabular and femoral hip prosthesis
  Auersperg V., Griessler W., Pieringer H., Boehler N. (A)
- The experience with the total Alloclassic prosthesis and the Metal/Metal Metasul coupling
  Randelli G., Visentin O., Lonati F., Romano C. (I)

15.30 Break

14.00 Free Paper Session
The femoropatellar joint in TKR

- Effect of femoral component conformity on clinical results with unresurfaced patellae
  Whiteside L., Emoto G. (USA)
- Experimental study of the effects of variable anterior posterior dimensions on patello-femoral load in total knee arthroplasty
  Beaufils Ph., Boisrenoult P., Diop A., Simondi M., Bouraly J.P. (F)
- Common sense universal patella implant for total knee arthroplasty
  Mendes D.G., Head S., Sabo E., Ricardo N., Boss J.H. (IL)
- Which kind of influence has the placement of the patella resurfacing on retropatellar pressure, strength and contact area?
  Fuchs S., Schütte G., Rosenbaum D., Witte H. (D)
- Ten year survivalship analysis on non-resurfacing of patella (patelloplasty) in total knee arthroplasy
  Touchie H.W., Dickinson D.B., Gozna E.R., Macdonald A.G. (CDN)

15.30 Break
14.00 Free Paper Session
Meniscus transplantation

- Viable meniscal allografts - 54 cases with a 1 to 8.7-year follow-up
  Verdonk R., Van Den Abbeeke K., Claus B., Van Daele P., De Smet P. (B)
- DNA typing in meniscal allografting
  Lootens T., Verdonk R., Messiaen L., Groessens E. (B)
- Arthroscopic meniscus transplantation using an all-inside technique: a minimum 2-year follow-up
  Bellemans J., Eid T., Fabry G. (B)
- The contact area and the pressure distribution: an in vitro study with collagen meniscus implants
  Wirz D., Zurfluh B., Göpfert B., Friederich N.F., Müller W. (CH)
- Comparison of long-term results between open and arthroscopic medial meniscectomy: a clinical and radiological follow-up
  Müller I., Schultz W. (D)
- Arthroscopic partial meniscectomy in patients over 70-years old
  Crevoisier X.M., Munzinger U., Drobny T., Wirz D., Zurfluh B., Göpfert B., Friederich N.F., Müller W. (CH)

15.30 Break

14.00 Free Paper Session
Femoropatellar joint

- The imaging of patellar alignment using MRI
  Müllner Th., Funovics M., Metz V., Schabus R., Vécsei V. (A)
- Anatomical factors related to patellar instability: a multi factorial analysis based on CT-scan and lateral X-rays
  Moyen B., Besse J.L., Lerat J.L., Abidi H. (F)
- MRI evaluation of objective patellar instability
  Escala J.S., Zanone X., Neyret Ph. (E & F)
- Inter- and intraobserver reproducibility for radiographic diagnosis and classification of femoral trochlear dysplasia
  Remy F., Chantelot C., Besson A., Migaud H., Gougeon F. (F)
- Open versus closed kinetic exercises in the treatment of patellofemoral pain - a prospective randomized study
  Witvrouw E., Bellemans J., Lysens R., Peers K., Fabry G. (B)
- Intrinsic risk factors for the development of anterior knee pain in an athletic population: a 2-year prospective study
  Witvrouw E., Bellemans J., Lysens R., Peers K., Fabry G. (B)

15.30 Break
15.45 Free Paper Session
Cemented THR

- Long-term survivorship of the Stanmore total hip replacement
  Deutman R., Mulder Th.J., Gerritsma-Bleeker C.L.E. (NL)
- Clinical and radiological results of cemented titanium stems after 8 year follow-up with a survival rate of 98.4%
  Berli B.J., Acklin Y.P., Morscher E. (CH)
- Mid-term results after THA with cemented titanium stems (Mueller-Geradschaftprothese)
  Rader C.P., Hendrich C., Loew S., Schmitz H., Eulert J. (D)
- Exeter universal total hip arthroplasty - eight to ten year results
  Williams Huw D.W., Timperley A.J., Ling R.S.M., Gie G.A. (UK)
- CPT collarless polished tapered stem
  Goebel D., Bannister G.C. (UK)

16.45 Break

15.45 Free Paper Session
Paediatric Orthopaedics: Miscellaneous

- Adductor tenotomy in cerebral palsy - unilateral or bilateral?
  Fernandez-Palazzi F., Medina J.R., Tricherri J.L. (YV)
- Anterior hip dislocation in cerebral palsy
  Brunner R. (CH)
- The musculoskeletal effect of a rigid ankle-foot orthosis in hemiplegic children
  Thompson N., Baker R., Cosgrove A. (IRL)
- Results of child fracture at foot and ankle
  Usami N., Inokuchi S., Hiraishi E., Miyanaga M., Waseda A. (J)
- Congenital clubfoot: muscular histopathology study in patients with surgical treatment
  Villani C., Aureli A., Persiani P. (I)
- Tarso-metatarsal release for resistant adduction of the forefoot in children
  Zanoli G., Rapali S., Paladini P., Chillemi C., de Palma L. (I)

16.45 Break
15.45 Free Paper Session
Spine fusion

- Interbody lumbar spine fusion with cancellous bone cement via a minimal invasive approach
  Wimmer C., Rachbauer F., Haid C., Krismer M., Stöckl B. (A)
- Postoperative analgesia after spine deformity surgery: the use of double epidural catheter
  Cathrein P., Min K., Böni T., Ruetsch Y., Borgeat A. (CH)
- Plaster of Paris as osteoconductive filler for interbody vertebral cages in mature sheep
  Hadjipavlou A.G., Simmons J.W., Simmons D.J., Nicodemus C.L. (USA)
- Use of “minimal” posterolateral arthrodesis in the degenerative lumbar spine
  Ganem F., Hansen F., Adam Y. (F)
- Biological and mechanical factors in postsurgical spinal instability
  Specchia N., Politano R., Cotta C., Greco F. (I)
- Multilevel lumbar fusions for degenerative spine disease
  Schaeren S., Dick W. (CH)

16.45 Break

15.45 Free Paper Session
Shoulder - instability

- Stabilization of initial anterior shoulder dislocation
  Jaeger A., Herresthal J., Kandziora F., Meister Ch. (D)
- Long-term results of the Bankart procedure for recurrent anterior shoulder instability: 74 cases at 16 years (10-24) of follow-up
  Chapnikoff D., Chantelot C., Fontaine C., Migaud H., Duquennoy A. (F)
- Arthroscopic shoulder stabilisation - A prospective comparison between Fastak and Suretac
  Koenig U., Imhoff A.B., Burkart A., Roscher E. (D)
- Posterior inferior capsular shift for repair of recurrent posterior shoulder subluxation
  Fuchs B., Jost B., Gerber C. (CH)
- Arthroscopic capsular shrinkage for patients with multidirectional instability of the shoulder
  Frostick S., Sinopidis C., Richmond J. (UK & USA)

16.45 Break
15.45 Free Paper Session
Idiopathic scoliosis

- MRI abnormalities in “symptomatic” adolescent idiopathic scoliosis
  Kumar S., Surawera H., Saifuddin A., Noordeen M.H. (UK)
- Is the standing or sitting forward bending position better for scoliosis school-screening?
  Grivas Th.B., Kuvaras J., Polyzois B.D. (GR)
- Clinical aspects of computer tomographic evaluation (CTE) models in severe complex spinal deformities
  Wuisman P.J.M., Van Dijk M., Robioneck B., Sugihara S., Smit Th.H. (NL)
- Correlation between clinical and roentgenographic parameters in idiopathic scoliosis - New mathematical formulas
  Sapkas G., Koudis G.L., Kateros K., Koukou U., Papagelopoulos P.J. (GR)
- Theoretical aspects of idiopathic scoliosis
  Zaidman A. (SU)
- Idiopathic scoliosis: an uncoupling of neuro-osseous growth?
  Porter R. (UK)

16.45 Break

15.45 Free Paper Session
Lunate/scaphoid bone

- Fractures and nonunions of the carpal scaphoid in children
  Fabre O., De Boeck H., Van Wellen P., Haentjens P. (B)
- Tendoplasty in rotary subluxation of the scaphoid
  Nicollof M., Dittmer, El Sigai-Teer (D)
- Magnetic resonance imaging in the assessment of revascularization following dorso-lateral wedge osteotomy for Kienboeck's disease
  Lamas Gomez C., Mir Bullo X., Martinez Poyato I., Llusa Perez M., Navarro Quilis A. (E)
- Finite element modeling of the lunate collapse in Kienboeck's disease
  Ledoux P., Schuind F., Lamblin D. (B)
- Dorsal subluxation of the lunate bone as a radiographic sign in the diagnosis of secondary instability of the radiocarpal joint
  Andjelkovic Z., Velickovic M. (YU)
- Accelerated healing of scaphoid fracture - a randomized study
  Mayr E. (D)

16.45 Break
Cementless acetabular component St. Nabor in primary total hip arthroplasty: a medium-term follow-up
Kreutz A., Kirschner P. (D)

Post-mortem analysis of 10 non-cemented acetabular SL-implants
Ochsner P.E., Ferrat P., Zimmerman P. (CH)

Exclusive use of cementless titanium hip joint endoprostheses in patients of 75 years and more
Zweymüller K., Lhotka Ch., Steindl M. (A)

Reaction of bone around stem and cup during 5 years after cementless implantation of an AML-hip-endoprosthesis
Roth A., Arnhold M., Babisch J., Winzer T., Venbrocks R.A. (D)

Periprosthetic bone mass changes five years after total hip arthroplasty with a cementless hollow-stem
Neubert O., Werhahn C., Zwönitzer R., Noack W. (D)

Cementless isotitan cup: a long-term follow-up study
Fusco U., Manta N., Monforte S., Avai A. (I)

Acetabulum 3D remodeling after Chiari osteotomy
Antonescu D., Sandu C., Cristea S., Muzahem R. (RO)

Chiari pelvic osteotomy for adolescent hip dysplasia
Djordjevic-Marusic N., Slavkovic S., Vukasinovic Z. (YU)

Long-term results of spherical acetabular osteotomies
Wagner M., Wagner H. (D)

The CT evaluation of peri-acetabular osteotomies
Haddad F.S., Garbuz D., Duncan C.P., Munk P.L., Janzen D. (CDN)

3D intertrochanteric osteotomy
Schäfer M., Klencsár Z. (H)
Free Paper Session
Meniscus repair

- Resorbable meniscus arrow for meniscal ruptures - results of a one year follow-up
  Hürel C., Mertens F., Verdonk R. (B)
- Primary stability of currently available meniscal repair techniques: an in vitro biochemical comparison
  Vandenneucker H., Bellemans J., Labey L., Fabry G., Van Audekercke R. (B)
- Cyclic mechanical testing of meniscus sutures
  Seil R., Rupp S., Kohn D. (D)
- Clinical examination provides more information after meniscal repair than MRI
  Egkher A., Müllner T., Fuchs M., Vecsei V. (A)
- Factors influencing meniscal healing and indications
  Asparouhov A., Zamfirov Z., Valeshkov J., Petrov P. (BG)

Free Paper Session
THR/TKR complications

- Fat and bone marrow embolism during total hip arthroplasty with uncemented and cemented stems
  Pitt R.P., Koessler M. (D)
- Prevention of deep thrombosis and infections in 1,000 patients undergoing total hip replacement
  Meyer M., Graßhoff H. (D)
- Pneumatic plantar compression versus low molecular weight heparin for the prevention of deep vein thrombosis after total knee replacement
  Warwick D.J., Harrison J., Whitehouse S.L., Glew D., Mitchelmore A.E. (UK)
- Graded compression stockings in lower limb arthroplasty
  Best A., Williams S., Gregg P.J., Crozier A., Hui A.C.W. (UK)
- Prevention of heterotopic ossification after total hip replacement
  Thienpont E., Mulier M., Stuyck J., Fabry G. (B)
- Indomethacin for three days is not effective as prophylaxis of heterotopic ossification after primary total hip arthroplasty
  Van der Heide H., Kooorevaar R.Th., Schreurs B.W., van Kampen A., Lemmens A. (NL)
- The operative therapy of periartricular heterotopic ossifications of the hip following brain and spinal cord injury
  Frank E., Mayr G., Ritschl P., Salzer M. (A)
Free Paper Session

Wear in THR

- Damage to acetabular polyethylene cups at implantation
  Baines J., Bould M., Rooker G. (UK)
- Contamination of polyethylene cups with polymethylmethacrylate particles - an experimental study
  Kesteris U., Lausmaa J., Carlsson L., Lidgren L., Wingstrand H. (S)
- Socket wear in bilateral simultaneous hip replacement
  Ilchmann T., Joshi A., Markovic L., Murphy J. (D)
- Hydroxyapatite (HA) and total hip prosthesis wear
  Nourissat Ch., Doyle C. (F)
- Characterisation of wear debris from alumina on alumina THA with different stems (CoCr, Ti-Alloy)
  Boehler M., Mochida Y., Bauer Th.W., Salzer M. (A & USA)
- Unacceptable early failure of a metal/metal surface replacement of the hip
  Scott G. (UK)
- Determination of cobalt and chrome blood concentrations in patients with different metal/metal pairings in total hip joint endoprostheses
  Lhotka C., Zweymüller K., Steffan I. (A)
- Innovative articulation for wear reduction of hip joint implants
  Streicher R.M., Taylor S., Edidin A. (CH)

Free Paper Session

Neuromuscular scoliosis

- Spinal stabilisation in Duchenne muscular dystrophy using the ISOLA-instrumentation - Analysis of complications and results
  Heller K.D., Wirtz D.C., Forst J., Forst R. (D)
- Surgical correction of post polio paralytic scoliosis in India - A review of 91 patients
  Debnath U., Mitra R.N., Banerjee A.K. (IND)
- CD instrumentation in neuromuscular scoliosis
  Sanchez-Sotelo J., Sanchez Perez-Grueso F.J. (E)
- Neuromuscular scoliosis - treatment and results of 105 cases
  Humke T., Heine J., Hopf Ch., Eysel P. (D)
17.00 Free Paper Session
Spine fusion technique

- The pedicle rib strut graft in reconstructive-corrective spine surgery
  Matiouchine A.F., Sizikov M.Y., Gavrilov V.A. (R)

- Segmental cortical allografts are effective implants for vertebral reconstruction
  Munting E., Mahy B., Manche E. (B)

- Biomechanical properties of a new universal spine system and their influence to the clinical use
  Gossé F., Vahldiek M., Wenger K., von Oldenburg G. (D)

- Should the rigidity of spinal instrumentation depend upon the indication? A prospective study
  Pfeiffer M., Griss P., Kienapfel H., Grande M. (D)

- Segmental instrumentation in degenerative disease of the lumbar spine, with or without degenerative scoliosis
  Gillet P., Petit M., Richard P., Andrianne Y. (B)

- Retroperitoneoscopic approach to the lumbar spine: preliminary report of 38 cases

17.00 Free Paper Session
Shoulder - trauma

- Shoulder function following non operative management of displaced middle third clavicle fractures
  Bowditch M., Stanley D. (UK)

- Surgical treatment of acromioclavicular dislocations

- PDS cord augmentation of the Weaver-Dunn procedure in acromioclavicular joint dislocation
  Wilson A., Dodenhoff R.M., Copeland S.A., Levy O. (UK)

- The Nottingham coracoclavicular ligament stabilisation for the treatment of acromioclavicular disruption
  Hartley R., Neumann L., Wallace W.A., Kiss J. (UK)

- Whiplash associated injuries to the shoulder - evaluation of a previously unrecognised problem
  Wallace W.A., Almeida I., Neumann L., Manning P.A. (UK)
Free Paper Session: Scoliosis

- Consequences of neurogenic mixed evoked potentials disturbance on the surgical strategy during scoliosis surgery
  Passuti N., Péron Y., The Tich Nguyen S., Delécrin J., Guiheneuc P. (F)
- Surface topography is useful to measure scoliosis rehabilitation outcome
  Weiss H.R. (D)
- Functional outcome in patients treated for idiopathic scoliosis
  Andersen M., Andersen G.R., Thomsen K., Christensen S.B. (DK)
- Lumbar pedicle screws versus laminar hooks in the treatment of idiopathic scoliosis with CD-instrumentation
  Wimmer C., Krismer M., Gluch H., Nogler M., Walochnik N. (A)
- Scoliotic deformity surgical correction with the spinal system DERO - radiometric analysis
  Nowak R., Wojciechowski P., Wojcik K., Miecznikowski W. (PL)
- Two year and x-ray results for patients with right thoracic adolescent idiopathic scoliosis (AIS) treated using the universal spine system (USS)

Free Paper Session: Benign bone tumours

- Osteoid osteoma at the hand - rare localisation, difficult diagnosis and complicate the treatment of a bone tumour
  Moehlen S. (D)
- Problems in the diagnosis and treatment of chondroblastoma
  Hamblen D.L., Reid R., Najjar D. (UK)
- Bone remodeling in unicameral bone cysts and localized Langerhanscell histiocytosis after intralesional injection therapy
  Raab P., Wild A., Witta A., Krauspe R. (D)
- Bone allografting material with BMP-like properties in active aneurysmal bone cysts: a new concept
  Delloye C., De Nayer P. (B)
17.00 Free Paper Session
Knee replacement

- Poor validity of the two most commonly used outcome questionnaires in total knee replacement
  Barton-Hanson N.G., Finley R., Parkinson R.W. (UK)
- Morbidity and perioperative risk in total knee arthroplasty
  Perka C., Arnold U., Buttgereit F. (D)
- Analysis of re-operation after AGC total knee arthroplasty - a Dutch multicenter study
- Revision TKR using the Dual-Articular Knee - minimum 5 year results
  Goddard N., Jennings S. (UK)
- Minimally invasive joint resurfacing with a flowable polymer
  Engebretsen L., Fasting O., Felt J., Arnold B., Kyle R. (N)

17.00 Free Paper Session
Acetabular revision THR

- Impaction grafting in cemented revision surgery of the acetabulum
- Morsellized allografts in acetabular cup revision: three to eight-year results
  Garcia-Cimbrelo E., Alonso-Biarge J., Cordero J. (E)
- 10 to 17 year follow up of acetabular reconstruction with impacted morsellized bone grafts and a cemented primary or revision THA in patients under fifty years
- Block allografts in revision total hip replacement
- Analysis of 103 acetabular revisions with allograft bone
  Böhm P., Banzhaf S. (D)
- Acetabular reconstruction using press fit shaped femoral heads
  Obenaus C., Girtler R., Winkler H., Schwägerl W. (A)
- Histology of impacted graft incorporation
  Ullmark G., Obrant K. (S)
17.00 Free Paper Session
Anterior/posterior cruciate ligament

- An anterior cruciate ligament study, with a 3D computed model: stretch during flexion, surgical repair
  Boisgard S., Levai J.P., Saidane K., Geiger B., Landjerit B. (F)

- Biomechanical comparison of different quadrupeded hamstring fixation techniques with titanium interference screw fixation of a patellar tendon bone graft in a bovine model
  Nebelung W. (D)

- ACL reconstruction: BPB-graft tensioned in 0° flexion: results after one year follow-up

- The effect of knee flexion angle on tibial tunnel drill angle during arthroscopically - assisted anterior cruciate reconstruction
  Power D., Forshaw M., Bowditch M., Edwards D. (UK)

- Surgical treatment of quadriceps femoris tendon ruptures with the dynamic tendon gripping technique
  Valavanis I., Valavanis S., Ioannides I., Hadjikomninos I, Tsangalis A. (GR)

- Role of the vascularity for the etiology of spontaneous quadriceps tendon rupture
  Petersen W., Stein V., Tillmann B. (D)

17.00 Free Paper Session
Hip Non-Trauma: Miscellaneous

- Digastric trochanter osteotomy for complex THR (72 cases)
  Langlais F., Lambotte J.C., Thomazeau H., Dreano T., Sevestre F.X. (F)

- Arthroscopic treatment of unresolved post traumatic hip pain
  Fontana A., Battistella F. (I)

- Acetabular cysts, labral tears and concomitant lesions in residual hip dysplasia (RHD)
  Hofmann S., Tschauner C., Urban M., Czerny (A)
All participants in the 4th EFORT Congress will receive a free copy of the EFORT Instructional Course Lecture Book volume 4. The Paris edition, volume 1 (£12) and the Munich and Barcelona edition, volumes 2 and 3 (£35 each) of the EFORT Instructional Course Lecture Book are still available at the Journal of Bone and Joint Surgery, 22 Buckingham Street, London, WC2N 6ET, UK, and will also be on sale at the JBJS booth in the exhibition hall of the Congress.
## EFORT – TUESDAY – PROGRAMME AT A GLANCE

ICL = Instructional Course Lecture, FPS = Free Paper Session, SS = Specialised Symposium

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<td>FPS: Low back pain</td>
<td>FPS: Elbow prosthesis/arthrolysis</td>
<td>FPS: Fracture treatment</td>
<td>FPS: Anterior/posterior cruciate ligament</td>
<td>FPS: Cementless TKR</td>
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The registration desk of the 4th EFORT Congress will be open on Friday, June 4 from 12.00 till 20.00 hrs and on Sunday, Monday and Tuesday from 07.00 hrs onwards.

**Tuesday, June 8**

**08.15**  Instructional Course Lecture  
New trends in long bone fracture fixation in the lower extremity  
C. Krettek (D)

**09.15**  Break

**09.30**  Free Paper Session  
Tibial diaphysis fractures

- Unreamed closed interlocking tibial intramedullary nailing  
Karatoprak Ö., Beksaç B., Demircay C. (TR)

- Results after primary unreamed nailing of tibial fractures with severe open or closed soft tissue injury compared to external stabilisation  
Klepsch M., Seidel Th., Runkel M., Rommens P.M. (D)

- Unreamed intramedullary nailing in proximal and distal fractures of the tibia - A borderline indication?  
Schauwecker H.H., Koch L. (D)

- Treatment of open tibial shaft fractures with reamed intramedullary nailing  
Baixauli E., Sanz D., Baeza J., Baixauli Sr. F., Baixauli Jr. F. (E)

- Tibial nail length: Use the height to get it right  
Keene G., Bowditch M. (UK)

- Cast treatment and intramedullary nailing for tibial shaft fractures - a cost analysis  

**10.45**  Break

**11.00**  Awards Ceremony

**12.00**  Lunch Break

**Tuesday, June 8**

**08.15**  Instructional Course Lecture  
The Norwegian implant register  
L.I. Havelin (N)

**09.15**  Break

**09.30**  Free Paper Session  
THR: Miscellaneous

- Cement-bone interface location in total hip arthroplasty by dual energy x-ray absorptiometry  
Chatoo M., Patel J., Higgins R., Banks L.M., Pearse M.F. (UK)

- Long-term wear behaviour of ceramic femoral heads in vivo - analysis of retrieved implants  
Mauch C., Puhl W., Willmann G., Scharf H.-P. (D)

- Cup loosening after Charnley low-friction arthroplasty in acetabular protrusion in relation with cup position  
Garcia-Cimbrelo E., Diaz-Martin A. (E)

- Histology of impacted graft incorporation  
Ullmark G., Obrant K. (S)

- Systemic antibiotic prophylaxis in primary THR: A study from the Norwegian arthroplasty register  
Engesaeter L., Lie S.A., Espehaug B., Havelin L.I. (N)

- Sexual intercourse following successful THA  
Dubrana F., Hu W., Stindel E., Le Nen D., Lefevre C. (F)

- Patient expectations of revision total hip arthroplasty  
Eisler Th., Svensson O., Wejkner B., Schmalholz A., Elmstedt E. (S)

**10.45**  Break

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The registration desk of the 4th EFORT Congress will be open on Friday, June 4 from 12.00 till 20.00 hrs and on Sunday, Monday and Tuesday from 07.00 hrs onwards.

Tuesday, June 8

08.15  Instructional Course Lecture
Contemporary treatment of unicompartmental arthrosis of the knee
A. Lindstrand (S)

09.15  Break

09.30  Free Paper Session
Unicompartmental knee replacement

- Progression of osteoarthritis after medial unicompartmental knee replacement: a blind and randomised study
- Clinical experience in revision of unicompartmental knee-prosthesis
  Neumann W., Becker R., Liebau Ch., Friedrichs F. (D)
- Unicompartmental knee arthroplasty - 5-11 years follow-up
  de Jonge T., Czipri M., Lovasz G. (H)
- Dexa evaluation of bone remodeling in the proximal tibia after unicompartmental prosthesis
  Romagnoli S., Spotorno L., Grappiolo G. (I)
- Outcome assessment after unicompartmental or total knee replacement: results from a randomised controlled trial using a validated questionnaire

10.45  Break

08.15  Instructional Course Lecture
HIV: the occupational hazards
R. Lemaire (B)

09.15  Break

09.30  Free Paper Session
Metatarsalgia

- Mechanical comparison of six different first metatarsal shaft osteotomies - Influence on postoperative immobilization
  Trnka H.-J., Parks P., Ivanc G., Easley M., Meyerson M. (USA)
- Regnault procedure in the surgical treatment of metatarsalgia: interpretation of follow-up x-ray imaging
  de Palma L., Gigante A., Chillemi C., Ventura A. (I)
- Lengthening-arthrodesis operation for brachymetatarsia
  Rapali S., Chillemi C., Paladini P., de Palma L. (I)
- Clinical and podographic long-term results after metatarsal head resection
- Evaluation of the transverse metatarsal arch of the foot with gait analysis
  Kanatli U., Yetkin H., Simsek A., Keser S., Guzel V. (TR)

10.45  Break
The registration desk of the 4th EFORT Congress will be open on Friday, June 4 from 12.00 till 20.00 hrs and on Sunday, Monday and Tuesday from 07.00 hrs onwards.

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**Tuesday, June 8**

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<td>Biology of cartilage repair</td>
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| 09.15 | Break |

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- Osteochondral autograft in chondral lesion treatment
  Delcogliano A., Franzese S., Caporaso A., Chiossi S., De Santis E. (I)
- Osteochondral autograft for treatment of osteochondritis dissecans of the knee
  Fabbriciani C., Milano G., Fadda S., Porqueddu P., Ziranu F. (I)
- Healing of autologous osteochondral grafts: clinical, MRI and arthroscopical results
  Petersen W., Laprell H. (D)
- Transplantation of osteochondral autografts - extended indication in different joints
  Oettl G.M., Traub S., Burkart A., Imhoff A.B. (D)
- Autologous chondrocytes implantation (ACI) for cartilage repair on 25 cases
  Bahuaud J., Buisson P., Romanet J.P., Gillet J.P. (F)
- Autologous Chondrocyte Transplantation (ACT) for the treatment of full thickness cartilage defects: results of a multi-center study
  Erggelet C., Mandelbaum B., Moseley J.B. JR. (D)

| 10.45 | Break |

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**Tuesday, June 8**

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| 09.15 | Break |

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- The long-term results of Charnley low-friction arthroplasty for ankylosing spondylitis
  Sochart D.H. (UK)
- The long-term results of Charnley low-friction arthroplasty for Paget's disease of the hip
  Sochart D.H. (UK)
- Total hip arthroplasty in juvenile chronic arthritis
  Hardinge K. (UK)
- Total hip replacement in congenital hip dysplasia using femoral bone rafting
  Becker R., Urbach D., Grasshoff H., Neumann H.W. (D)
- Endoprosthetic treatment of high hip dislocation
  Perka C., Thomas R. (D)
- Total joint arthroplasty and preoperative disease severity under different healthcare delivery systems
  Psychoyios V., Berven S., Crawford R., Murray D. (UK)

| 10.45 | Break |
The registration desk of the 4th EFORT Congress will be open on Friday, June 4 from 12.00 till 20.00 hrs and on Sunday, Monday and Tuesday from 07.00 hrs onwards.

08.15  Instructional Course Lecture
Soft tissue coverage in orthopaedic surgery
P. Wylock (B)

09.15  Break

09.30  Free Paper Session
Femur diaphysis fractures

- Treatment of ipsilateral-simultaneous fractures of the femur and tibia
  Theodoratos G., Papanikolaou A., Kastanis G., Lochovitis K., Apergis E. (GR)
- Bilateral fractures of the femur: early fracture fixation and systemic complications
  Caba P., Oteo J.A., Delgado E., Cecilia D., Candel L. (E)
- Quadriceps function following operative treatment of femoral shaft fractures
  Wojcik K., Wojciechowski P., Dec J., Kusz D., Wronska S. (PL)
- Corrective osteotomy for femoral shaft fracture malunions
  Oransky M., Todesca A., Paladino A., De Santis E. (I)
- The treatment of femoral fractures with intramedullary nailing - A review of 184 cases
  Kastanis G., Deimedes G., Piotopoulos A., Theodoratos G., Maris J. (GR)
- Breakage of interlocking screw after intramedullary nailing of femoral shaft fracture
  G.I. Im, Shin J.H., Kim D.Y., Cho W.H. (ROK)
- Flexible intramedullary nailing and use of functional brace in the treatment of the pediatric femoral shaft fractures
  Yensel U., Baly E., Onçag H., Alpaydin S. (TR)

10.45  Break

10.45  Free Paper Session
Paediatric Orthopaedics:
Developmental dysplasia of the hip

- Failed closed reduction in developmental dysplasia of the hip
- Short-term evaluation of open reduction of the hip in DDH
- One-stage surgery of CDH in children aged between 1-5 years
  Czipri M., Bellyei A. (H)
- Assessment of improvement of both the concentric reduction and acetabular cover by steel osteotomy
  Poul J., Vejrostova M. (CS)
- Risk factors leading to Salter osteotomy after at first successful treatment of congenital hip dislocation
  Dierauer S., Hefti F. (CH)
- The operative treatment of high, inveterate, congenital hip dislocations
  Wojciechowski P., Wójcik K., Nowak R., Wrónski S. (PL)
The registration desk of the 4th EFORT Congress will be open on Friday, June 4 from 12.00 till 20.00 hrs and on Sunday, Monday and Tuesday from 07.00 hrs onwards.

09.30  Free Paper Session  
Spine - infection

- The effectiveness of Gallium-67 radionuclide imaging in pyogenic and tuberculous infection of the spine  
  Necessary J.T., Hadjipavlou A.G., Cesani-Vazquez F., Villaneuva-Meyer J. (USA)
- A diagnostic and therapeutic algorithm for spondylodiscitis  
  Wirtz D.C., Genius I., Wildberger J., Zilkens K.W., Niethard F.U. (D)
- Treatment of the pyogenic vertebral osteomyelitis  
  Greco F., Specchia N., Politano R., Pirani P. (I)
- Management of neurological complications of pyogenic infection of the spine  
- Percutaneous transpedicular management of lumbar spondylodiscitis  
- Strategy for Pott’s disease surgery during the acute phase  
  Benazet J.P., Ramaré S., Barrabas D., Robin H., Saillant G. (F)
- Pott’s disease - ten years experience  
  Ubierna M., Caceres E., Del Pozo P., Ruiz A., Roca J. (E)

10.45  Break

09.30  Free Paper Session  
Knee - fractures

- Articular patellar fractures: functional outcome and biomechanical pattern  
  Varatojo R., Fernandes P., Dias S., Gomes R. (P)
- Patella fracture fixation using metal wire or non-absorbable polyester - a study of 37 cases  
  Gosal H.S., Singh P., Field R.E. (UK)
- Late results of surgical treatment of patellar fractures  
  Graf V., Peter R. (CH)
- Long-term results of unicortylar fractures of the femur  
  Mestdagh H., Maynou C., Dubois H.H., Podglajen J., Petroff E. (F)
- Arthroscopic approach to knee joint injuries in children  
  Smigielski R., Matuszewski S., Pawlowski M., Bialozewski D. (P)
- Surgical treatment of type C intra-articular fractures of the distal femur  
  Petsatodes G., Christodoulou A., Dionelis P., Sayegh F., Pournaras J. (GR)
- Radiographic evaluation of the final outcome in the treatment of supra-and intra-condylar fractures of distal femur  
  Goldhahn J., Bach O., Bühler M., Hehli M. (D)

10.45  Break
14.00 Specialised Symposium
Principles of fixation of long bone fractures
C.M. Court-Brown (UK)

- The current status of intramedullary nailing of lower limb fractures
  Court-Brown C.M. (UK)
- Plates and internal fixations
  Perren S.M. (CH)
- Bone marrow embolism in intramedullary nailing
  Wenda K. (D)
- The role of Ilizarov fixation in long bone fractures
  Catagni M.A. (I)
- Nailing of upper limb fractures
  Schandelmaier P. (D)

15.30 Break

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14.00 Specialised Symposium
Bone reconstruction in revision THR
T. Slooff (NL)

- Introduction to the theme
  Slooff T. (NL)
- Bone reconstruction with the revision femoral stem in RTHA
  Wagner H. (D)
- Endomedullary femoral reconstruction with massive femoral allograft
  Kerboull M. (F)
- Acetabular reconstruction with metallic armature and allografts – technique and long-term results
  Kerboull M. (F)
- Bone reconstruction with morsellised graft in femoral RTHA
  Ling R.S.M. (UK)
- Hydroxyapatite coatings in femoral hip revision arthroplasty
  Geesink R.G.T. (NL)

15.30 Break
14.00 Specialised Symposium
Rotator cuff surgery
J. Eulert (D)

- Assessment of rotator cuff insufficiency
  Hertel R. (CH)
- Open repair of the rotator cuff – one and two tendon tears
  Emery R. (UK)
- Treatment of massive cuff tears
  Molé D. (F)
- Arthroscopic treatment of rotator cuff lesions
  Resch H. (A)
- Pre- and post-surgical management of rotator cuff repair – the case for rehabilitation
  Nowak J. (S)

14.00 Specialised Symposium
Lumbar spinal stenosis
F. Postacchini (I)

- Constitutional stenosis: indications, techniques and results of surgery
  Porter R.W. (UK)
- Multilevel degenerative stenosis: how to manage?
  Grob D. (CH)
- Isolated nerve-root canal stenosis: pathology and therapeutic strategies
  Crock H. (UK)
- Foraminal stenosis: myth or reality?
  Stromqvist B. (S)
- Stenosis in degenerative spondylolisthesis: when to fuse?
  Wittenberg R. (D)
- Stenosis in degenerative scoliosis: decompression alone, fusion in situ, correction?
  David T. (F)
- Failures of surgery: causes and management
  Cinotti G. (I)

15.30 Break
15.30 Break
Specialised Symposium
Shoulder prostheses
G. Walch (F)

- Indications and results of shoulder arthroplasty in primary gleno-humeral osteoarthritis
  Randelli M. (I)
- Indications and results of shoulder arthroplasty in osteoarthritis and massive rotator cuff tear
  Wallensten R. (S)
- Rheumatoid arthritis
  Copeland Steve (UK)
- Arthroplasty in fractures of the proximal humerus
  Resch H. (A)
- Shoulder arthroplasty after post-traumatic arthritis
  Gerber C. (CH)
- Total or hemi-arthroplasty?
  Walch G. (F)

Specialised Symposium
The science of ACL reconstruction
L. Engebretsen (N)

- Scientific rationale for ACL reconstruction
  Engebretsen L. (N)
- Graft choice in ACL surgery
  Kohn D. (D)
- Fixation choice in ACL surgery
  Karlsson J. (S)
- Technical issues in ACL surgery
  Ekstrand J. (S)
- Rehabilitation after ACL surgery
  Jorgensen U. (DK)

Break
14.00 Free Paper Session
Femoral neck fractures

- Treatment for displaced intracapsular fracture of the proximal femur - a prospective randomised trial in patients aged from 65 to 79 years
  Davison J.N.S., Harper W.M., Gregg P.J. (UK)
- Intracapsular fractures of the femoral neck - long-term results of ASNIS screw fixation
  Theodoratos G., Piotopoulos A., Deimentes G., Lochovitis K., Antoniou N. (GR)
- Short and long-term results of internal fixation with screws of fresh femoral neck fractures
  Efstathopoulos N., Karras K., Papachristou G., Agoropoulos Z., Chronopoulos E. (GR)
- High failure rate of internal fixation of femoral neck fractures
  Waseem M., Henry A.D., Sochart D.H., Hirst P. (UK)
- Internal fixation or arthroplasty for displaced intracapsular fractures in the elderly - A randomised trial
  Parker M.J. (UK)
- Austin Moore hemiarthroplasty for hip fractures: a long-term follow-up of a consecutive series of 500 patients
  Rao J., Parker M.J. (UK)
- Clinical and roentgenographic studies of the concentric bipolar prosthesis
  Bahrs C., Zichner L., Maronna U., Starker M. (D)

15.30 Break
14.00 Free Paper Session
Talus / Calcaneus

- Arthroscopic treatment of osteochondritis dissecans of the talus with K-wire drilling - clinical and MRI - follow-up
  Lahm A., Erggelet C., Reichelt A. (D)
- Osteochondritis dissecans of the talus - conclusions of a 10-year survey of ankle arthroscopy
  Schimmer R.C., Skarvan J., Dick W., Hintermann B. (CH)
- Long-term follow-up of arthroscopic treatment of osteochondral lesions of the talus
  Besse J.L., Cladière F., Moyen B., Lerat J.L. (F)
- Posterior ankle impingement syndrome in dancers
  Labs K., Leutloff D. (D)
- Surgical treatment for thalamic fractures of calcaneus: compared analysis and prognostic factors related to 88 cases
  Colom A., Begue T., Masquelet A.C. (F)
- Operative treatment of calcaneal fractures
  Karachalios T., Vagianos E., Roidis N., Tsagarakis G., Pantazopoulos Th. (GR)

15.30 Break

14.00 Free Paper Session
Cervical spine

- Measuring quality of life in patients with diseases of the cervical spine: a new symptom-specific scale
  Koller M., Kienapfel H., Hinder D., Griss P., Lorenz W. (D)
- Calcification of cervical ligamentum flavum in West Indian patients
  Pascal-Mousselard H., Cabre P., Smadja D., Kaidomar S., Catonne Y. (F)
- Densitometric, structural and mechanical properties of the dens of the axis recorded from P-QCT studies
  Lycomitros V., Karachalios Th., Korres D., Roidis N., Manavi P. (GR)
- Anterior cervical fusion for discal herniation
  Bataillie F., Myncke J., Van Roy J. (B)
- The use of hydroxyapatite interbody shaped blocks combined with a memory shape staple stabilization for cervical anterior fusion
  Ricart O. (F)
- Pseudarthrosis and juxta-fusion segment instability after anterior cervical fusion without plate instrumentation
  Kienapfel H., Hinder D., Koller M., Pfeiffer M., Griss P. (D)

15.30 Break
**15.45 Free Paper Session**
Tibial diaphysis fractures

- The intact fibula revisited
  Henderson M.S., Langkamer V.G., Bose D. (UK)
- The treatment of unstable tibial fractures with ender nails and tension bands
  Samota I., Ulea M. (RO)
- Treatment of compound C2 tibial shaft fracture with polfix external fixator pillar version
  Bogdan W., Nowak R., Mrozek S., Kaleta M., Sluzalek M. (P)
- Minimally invasive percutaneous plate fixation for tibia fractures
  Schuster A.J., Gautier E., Jakob R.P. (CH)
- The orthofix tibial nailing system: clinical and radiological evaluation
  Karachalios T., Babis G., Tsarouchas J., Roidis N., Pantazopoulos Th. (GR)
- Therapeutical considerations in the treatment of the open tibia fractures, running the risk of compartmental syndrome
  Obada N., Lupescu V., Badarau I. (RO)

**16.45 Break**

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**15.45 Free Paper Session**
Impaction bone grafting in revision THR

- Impaction grafting for femoral bone loss in revision hip surgery
  de Thomasson E., Guingand O., Mazel Ch. (F)
- Revision of total hip arthroplasty with cemented and noncemented femoral impaction bone grafting
- Exeter impaction grafting technique in total hip replacement: bone packing and cement mantle with old and new instruments
  Keenan J., Williams H., Sioen W., Cnudde P., Timperley A.J. (UK)
- Stability of femoral stems in revision total hip arthroplasties with impacted human cancellous allograft
  Kobayashi A., Ohashi H., Kadoya Y., Yamano Y., Tanabe Y. (J)
- Plain radiograph measurement of femoral stem migration following revision arthroplasty of the hip with impaction grafting of the femur
  Howell J., Clarnette R., Gie G.A., Ling R.S.M. (UK)
- Impaction grafting in hip revision: follow-up at 3.5-6 years
  Ghera S., Iannone S., Santori N., Santori F.S. (I)
- Early stem stability following impaction grafting - a case matched analysis
  Kamineni S., Pearse M. (UK)

**16.45 Break**
15.45 Free Paper Session
Rotator cuff tears

- Surgical treatment of full-thickness rotator cuff tears over the age of 60
  Handelberg F., Isenborghs S. (B)
- Electromyographic analysis of the glenohumeral muscles following surgical treatment of rotator cuff tears
  Fokter S., Skorja J. (SL)
- Evaluation of factors affecting the time taken to return to driving after a rotator cuff repair
- Clinical outcome of structurally failed rotator cuff repair
  Jost B., Pfirrmann C., Gerber C. (CH)
- Influence of supraspinatus and infraspinatus muscle fatty degeneration on the incidence of tendinous cuff reruptures after surgical repair of complete tendinous tears
  Postel J.M., Goutallier D., Bernageau J., Allain J. (F)
- Full thickness rotator cuff tears - the longest follow-up
  Jacobs S., Williams H., Moir J., Welch B., Welch R.P. (CDN)
- Pathologic changes of the long head of the biceps brachii
  Vosburgh C.L., Neviase T.J. (USA)

16.45 Break

15.45 Free Paper Session
Low back pain

- Clinical relevance of specific parameters isolated within the Oswestry and Roland-Morris functional disability scales
  Boscainos P., Sapkas G., Stilianesi E., Prouskas C., Stathakopoulos D. (GR & UK)
- Correlates of psychological testing with provocative pain testing
  Barclay R.D., Hadjipavlou A.G., Borowski A., Crow W.N. (USA)
- Outcome clinical predictors in first-time lumbar disc surgery: a multivariate analysis
  Correia-de-Sá P., Freitas R., Ribeiro A., Neves J.M. (P)
- Prognostic criteria for return to work after standard lumbar discectomy
  Rompe J.D., Zöllner J., Küllmer K., Eysel P., Heine J. (D)
- Transpedicular external fixation of the lumbar spine is predictive of the outcome of lumbar fusion for degenerative disease
  Munting E., Pendeville E., Soupart J., Mahaudens Ph. (B)
- Temporary external transpedicular fixation of the lumbosacral spine
  van der Schaaf D.B., van Limbeek J., Pavlov P.W. (NL)
- Greater trochanteric bursitis pain syndrome in patients with chronic low back pain and sciatica
  Sayegh F., Kapetanos G., Dimitriou C., Papadimitriou N., Pournaras J. (GR)

16.45 Break
15.45 Free Paper Session
Shoulder prosthesis

- Should glenoid component version be related to its loosening? An experimental investigation
  Sheikh R., Nyffeler R.W., Feusi T., Jacob H.A.C., Gerber C. (CH)
- Influence of glenoid peg design on pullout strength
  Nyffeler R.W., Anglin C., Sheikh R., Gerber C. (CH)
- Replacement of the cuff deficient shoulder using a bipolar shoulder prosthesis
  Schill S., Thabe H., Biehl C. (D)
- Rheumatoid arthritis: indications and results of shoulder arthroplasty
  Copeland S. (UK)
- Results of revision surgery after shoulder arthroplasty
  Loehr J.F., Schoettle P., Schwyzer H.K., Simmen B.R., Gschwend N. (CH)
- Revision surgery after shoulder arthroplasty
  Jost B., Sebesta A., Nyffeler R., Gerber C. (CH)

16.45 Break

15.45 Free Paper Session
Anterior cruciate ligament

- Is the superacute arthroscopic ACL-reconstruction a beneficial treatment?
  Urfer A.U., Patt T.W., Ahlbäumer G. (CH)
- Timing of anterior cruciate ligament reconstruction
  Bradbury N., Holt M., Banff M., Cross M.J. (AUS)
- The clinical value of graft-twisting in anterior-cruciate ligament surgery - a prospective in vivo study
  Arnold M.P., Van Kampen A., Blankevoort L. (NL)
- Graft elongation after ACL reconstruction
  Rupp S., Müller B., Seil R., Kohn D. (D)
- Long-term results of tendon allograft replacement in ACL deficient knees
  Vorlat P., Verdonk R., Arnauw G., Verstraete K. (B)
- Anterior cruciate ligament injuries: availability of information on the Internet
  Rose S., Bruce J., Maffulli N. (UK)

16.45 Break
15.45 Free Paper Session
Femoral neck fractures

- The economic cost of hip fractures among elderly women - a one-year prospective study
  Haentjens P., Autier Ph., Boonen S., Bentin J., Baillon J.-M. (B)
- Hip fracture risk factors evaluation with the use of DEXA measurements in patients over 60 years of age
  Kaleta M., Nowak R., Kusz D., Wojcik B., Jurkiewicz A. (PL)
- Femoral osteoporotic fractures are predictable by radial peripheral quantitative computed tomography
  Braun K., Niedhart C., Stenbock-Femor N., Bours F., Zilkens K.W. (D)
- Risk factors for hip fracture in elderly women
  Haentjens P., Autier Ph., Boonen S., Bentin J., Baillon J.-M. (B)
- Is the continued use of Pauwels classification justified
  Parker M.J., Dynan Y. (UK)
- Nocturnal hypoxaemia in patients following hip fracture
  Jari S., Clague J.E., Namushi N.R., Natusch D., Horan M.A. (UK)

16.45 Break

15.45 Free Paper Session
Blood saving in TKR

- Autotransfusion in total knee arthroplasty - Is it worth the effort?
  Sait M.S., Earnshaw P. (UK)
- A prospective randomized study of wound drainage versus non drainage in primary total hip or knee replacement
  Mengal B., Aebi J., Rodriguez A., Lemaire R. (B & F)
- Primary total knee replacement: with or without drain?
- Blood loss after total knee arthroplasty in relation to positioning: 70° flexion versus extension
  Speck M., Jakob R., Brinkmann K.E. (D)

16.45 Break
15.45 Free Paper Session
Sports medicine

- Arthropathy after high-performance karate - analysis of the training methods for a specific prevention
- Recurrent effort-related compartment syndrome of the forearm in motocross racers
  Claes T., Verfaille S., Bataillie F. (B)
- The influence of ‘warming up’ on knee proprioception prior to sporting activity
  Bartlett M., Warren P., Bentley G. (UK)
- Mechanical evaluation of the “suture anchor/suture” system
  Rupp S., Seil R., Müller B., Gauß C., Kohn D. (D)
- Cryotherapy reduces local inflammation after trauma
  Menth-Chiari W.A., Curl W.W., Smith T.L. (USA)

16.45 Break

15.45 Free Paper Session
Kyphosis

- Practical use of the surface measuring system: follow-up of patients with Scheuermann’s disease
  Weiss H.R., Lohschmidt K., El-Obeidi N. (D)
- Simultaneous anterior-posterior approaches in the treatment of short-segment kyphosis of the thoracolumbar spine: advantages and technical difficulties
  Yazici M., Acaroglu E. (TR)
- Posterior total wedge resection osteotomy for surgical treatment of rigid kyphosis
  Domanic U., Talu U., Sar C., Hamzaoglu A. (TR)
- Thoracoscopic ligamentous release of the thoracic spine - A new technique
  Birnbaum K., Pieper S., Heller K.D., Siebert C.H., Niethard F.U. (D)

16.45 Break
17.00 Free Paper Session
Nonunion of diaphyseal fractures of the tibia

- Delayed union and nonunion - a safe and effective treatment
  Moyen B., Mainard D., Azoulai J.-J., Toullec E. (F)
- Treatment of tibial defects with Ilizarov external fixator (IEF)
  Vaitkunas V. (LT)
- Reamed intramedullary nailing in treatment of aseptic tibial nonunion
  Athanassopoulos I., Megas P., Lambiris E. (GR)
- An effective therapy for nonunions - low-intensity ultrasound
  Albers R., Patka P., Janssen I.M.C., van der Krans A. (NL)
- Nonunions treated by pulsed low-intensity ultrasound
  Gebauer D., Mayr E., Orthner E. (D & A)
- Use of high-energy extracorporal shock-wave therapy (ESWT) in pseudarthrosis - A metaanalysis of clinical studies
  Heller K.D., Wirtz D.C., Birnbaum K., Niethard F.U. (D)

17.00 Free Paper Session
Revision THR (Acetabulum)

- Acetabular revision with the Harris Galante cementless cup - ten years experience
  Tabutin J., Vajeu C., Vogt F. (F)
- An oblong revision cup for large acetabular defects
  Willert H.-G., Köster G. (D)
- Acetabular revision with the pedestal cup
  Schoellner C., Schwitalle M., Schunck J., Eckardt A., Heide J. (D)
- Results of acetabular revisions using reinforcement rings
  Daroussos N., Zambelli P.-Y., Leyvraz P.-F. (CH)
- Major acetabulum reconstructions using bulk structural allografts and the Kerboull acetabular device
  Hamadouche M., Kerboull L., Courpied J.P., Kerboull M. (F)
- Acetabular bone stock loss reconstructed with impacted morselized bone grafts and a cemented total hip arthroplasty: a ten to seventeen year follow-up study in primary THA
  Schreurs B.W., Welten M., Buma P., Verdonschot N., Slooff T.J.J.H. (NL)
- Heterogenic bone transplantation for acetabular reconstruction
  Kleihues H.T., Albrecht S., Weingärtner J., Semmler J., Noack W. (D)
• Fenestration of the femoral diaphysis as a standard procedure in revision hip surgery
Zweymüller K., Steindl M., Engelhardt Ch., Lhotka Ch. (A)

• Endoscopy of the femur in revision hip surgery
Govaers K., Roels J., Verstreken J. (B)

• Revision total hip arthroplasty using third-generation cementing technique
Eisler Th., Svensson O., Iyer V., Wejkner B., Elmstedt E. (S)

• Clinical results of cement removal in hip revision arthroplasty with a new device (intracorporal lithotripter - Swiss-Orthoclast)
Porsch M., Schmidt J. (D)

• A new cannulated distally locked femoral revision component to treat periprosthetic fractures and massive proximal femoral bone loss in hip arthroplasty
Charnley G.J., Anderson G.H., Goddard J.C. (UK)

• Mid-term results of the Wagner SL revision stem
Böhm P., Bischel O. (D)

• The Wagner SL femoral stem for revision total hip replacement
Hobby J.L., Wimhurst J., Hudson I., Marx C. (UK)

• Cytokines and growth factors in the herniated lumbar disc tissue
Pagnotta A., Specchia N., Politano R., Logroscino G., Toesca A. (I)

• Interventional MRI assisted percutaneous cryotherapy of lumbar facet joint syndrome, technique and preliminary results
Ahlbäumer G., Roy J.F., Montminy P., Moisan C. (D, CH & CDN)

• Treatment of lumbrosacral radicular pain by epidural steroid injections
Petrou H., Papagelopoulos P., Kateros K., Koundis G., Psomas M. (GR)

• Deterioration of results in conventional discal surgery – retrospective study of 360 cases
Ruiz Arranz J.L., Fernandez De Rota J.J., Lechner M.G. (E)

• Biomechanical measurements on two different artificial disc implants – An in vitro study
Eysel P., Humke T., Rompe J.D., Zöllner J. (D)

• Lumbar disc prosthesis: 5 years follow-up study on 66 patients
David T.J. (F)
### 17.00 Free Paper Session

**Elbow prosthesis/arthrolysis**

- **Benefits of the Roper-Tuke total elbow arthroplasty**  
  Fearn B., Yanni O.N., Gallannaugh S.C., Joshi R. (UK)

- **The role of total elbow replacement for distal humeral fractures**  
  Pinak S.R., Bhamra M.S. (UK)

- **Revision elbow arthroplasty using unlinked components**  
  Pooley J., Du Fosse J., Karachalios G. (UK)

- **523 elbow arthrolyses for post-traumatic stiffness: results and prognostic factors**  
  Chantelot C., Jardin C., Fontaine C., Migaud H., Migaud H., Duquennoy A. (F)

- **The stiff elbow: arthroscopic release for limitation of motion of the elbow**  
  Branner S., Pfahler M., Refior H.J. (D)

### 17.00 Free Paper Session

**Fracture treatment**

- **A new method of closed fracture reduction using remote controled motorized reduction device**  
  Mitkovic M. (YU)

- **Adjustable casting with focused rigidity - a prospective randomised study**  
  Cohen A., Shaw D., Petty A. (UK)

- **The structural properties of new and traditional fracture cast constructs under static loading conditions**  
  Becker B., Shaw D.L., Roy B., Hepple D., Jin Z.M. (UK)

- **AO screws coated with bioactive materials significantly improve bone screw stability**  
  Moroni A., Faldini C., Rocca M., Stea S., Giannini S. (I)

- **Point contact fixator: an alternative method of biologic fracture fixation**  
  Psychoyios V., Edmunds I., Patel M., Fairman E., Jupiter J. (USA)

- **Absorbable fixation in the treatment of proximal tibial osteotomies and fractures - a clinical study**  
  Tuompo P., Partio E.K., Rokkanen P. (SF)

- **External fixation tapered pins coated with hydroxyapatite improve bone pin stability**  
  Moroni A., Faldini C. Heikkila J., Magyar G., Giannini S. (I, SF & S)
**Free Paper Session**

**Anterior/posterior cruciate ligament**

- Unsatisfactory results after conservative treatment of anterior cruciate ligament (ACL) rupture in a low demand population  
  Eygendaal D., Beumer A., Sauter A.J.M. (NL)

- Increased muscle stiffness after ACL reconstruction - memory on injury  
  Antolic V., Pavlovic V., Strazar K., Pompe B., Vengust R. (SL)

- Intra-operative complications in single incision arthroscopically aided primary anterior cruciate ligament reconstructions  
  Tandogan R.N., Kayaalp A., Demirörs H., Teker K., Tuncay I.C. (TR)

- Blood loss in anterior cruciate ligament (ACL) reconstruction with and without intercondylar notchplasty  
  Pape D., Gödde S., Kohn D. (D)

- Double bundle posterior cruciate ligament reconstruction using hamstring tendon and biodegradable interference screw fixation  
  Stähelin A.C., Südkamp N., Feinstein R., Weiler A. (CH)

- Simultaneous ACL/PCL reconstruction arthroscopically assisted: when & how?  
  Margheritini F., Adriani E., Camillieri G., Maresca G., Mariani P.P. (I)

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**Cementless TKR**

- Pertinent cementing technique in knee arthroplasty  
  Gerber B.E. (CH)

- The 10 years results of the Insall-Burnstein II TKR  
  Li P., Zamora J., Bentley G. (UK)

- Knee prostheses in Norway 1994-1997: a report from the Norwegian Arthroplasty Register  
  Furnes O., Lie S.A., Espehaug B., Havelin L.I. (N)

- Comparison of uncemented and cemented Interax total knee arthroplasties in osteoarthritis and rheumatoid arthritis  
  Stukenborg-Colsman C., Wirth C.J. (D)

- Multicenter prospective seven- to nine- year experience with cementless fixation in total knee arthroplasty  
  Scott D.F., Hofmann A.A., Camargo M.P. (USA)

- Hydroxyapatite in total knee replacement - Early clinical and radiological results  
  Holt M., Bradbury N., Roger G., Cross M.J. (AUS)
17.00 Free Paper Session
TKR specific indications

- Total knee replacement for hemophilic arthropathy: A study of 26 cases
  Gougeon F., Strouk G., Besson A., Marey A., Duquennoy A. (F)
- Rotating hinged, hydroxyapatite coated versus fixed hinged, uncoated distal femoral replacements - A study of 402 cases
  Unwin P., Blunn G., Cannon S., Grimer R., Walker P. (UK)
- Total knee arthroplasty in previously arthrodesed or ankylosed knee joints: a 60-month follow-up
  Tibesku C.O., Henkel Th.R., Drobny T., Munzinger U. (CH)

17.00 Free Paper Session
Spondylolysis

- Nonoperative treatment of acute spondylolysis in competitive athletes
  Sys J., Michielsen J., Bracke P., Martens M., Verstreken J. (B)
- Direct repair of pars interarticularis defect in situ for grade 1 isthmic spondylolisthesis using only bone graft
  Nikolaidis A., Papanikolaou A., Polyzoides A.J. (UK)
- Direct repair of spondylolysis without spondylolisthesis using an original Rod screw construct
  Gillet P., Petit M. (B)
- Rational approach for the operative correction of ankylosed spondyloptosis
  Metz-Stavenhagen P., Morgenstern W., Völpel H.J., Krebs S. (D)
Industry and Exhibition

June 3 - 8, 1999
Brussels

EFORT

4th Congress of the European Federation of National Associations of Orthopaedics and Traumatology

Industry and Exhibition
Satellite Symposiums and Workshops organised by the Industry

Saturday, June 5

12.00  Satellite Symposium
Sulzer Orthopedics Ltd.
Durasul™ – tribological system without measurable wear

12.00  Satellite Symposium
Fidia
Role of sodium hyaluronate in local therapy of arthropathies

18.00  Workshop
Sulzer Orthopedics Ltd.
PFM-revision hip system

18.00  Workshop
Sulzer Orthopedics Ltd.
GSB III elbow prosthesis

18.00  Workshop
Sulzer Orthopedics Ltd.
Thrust plate prosthesis for hip (epi-metaphyseal fixation)

Sunday, June 6

12.00  Workshop
DePuy

12.00  Workshop
Electro Medical Systems (EMS) Switzerland
Pneumatically generated shock waves in orthopaedics – a new therapeutical and economic approach

18.00  Workshop
Sulzer Orthopedics Ltd.
Anatomica shoulder prosthesis

18.00  Workshop
Electro Medical Systems (EMS) Switzerland
Endoscopically controlled hip revision arthroplasty
Satellite Symposiums and Workshops organised by the Industry

Monday, June 7

12.00 Satellite Symposium
Genzyme
Carticel: cartilage repair – Genzyme tissue repair

12.00 Satellite Symposium
Mathys
Option 3000

Tuesday, June 8

12.00 Workshop
Sulzer Orthopedics Ltd.
Computer assisted surgery

12.00 Workshop
Sulzer Orthopedics Ltd.
Bone cement and application systems

12.00 Workshop
Sulzer Orthopedics Ltd.
Osteochondral transplantation with the SDS™ soft delivery system
EFORT would like to thank the following companies for their active support of the 4th EFORT Congress

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June 3 - 8, 1999
Brussels

E F O R T
4th Congress of the European Federation of National Associations of Orthopaedics and Traumatology

General Information Booklet
SOCIAL ACTIVITIES

Opening Ceremony

The official opening of the 4th EFORT Congress will be followed by a reception.

Date: Saturday morning, June 5, 1999.

The Belgian Night

The organisers are pleased to invite all participants and registered accompanying persons to this special event.

Participation in the Belgian Night is free but registration is mandatory. Entrance will be free upon presentation of a special admission voucher. This admission voucher must be ordered when registering for the Congress (see registration form) and will be sent together with a confirmation of registration.

Date: Saturday evening, June 5, 1999.
Venue: Hall 12 of the BICC

Banquet

The official Banquet of the 4th EFORT Congress will take place at Autoworld, an Art Nouveau building dating from the 19th Century. Autoworld houses the world’s largest collection of antique and classic cars.

These unique surroundings combined with Gastronomy with a capital G (the caterer has a Michelin star rating) will turn the Banquet into an unforgettable and enchanting evening.

Participants will have the opportunity to admire the car collection during cocktails preceding the Banquet.

Please inform Medicongress before April 30, 1999 in case of special dietary requirements.

The number of seats is limited and participants are strongly advised to register in time.

Bus transport between the city centre and Autoworld will be provided.

Date: Sunday, June 6 at 20.00 hrs.
Venue: Jubelpark - Parc du Cinquantenaire
Rate:

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<th>Until 30/04/99</th>
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<td>3,500 BEF (if seats are still available)</td>
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All recent information on the EFORT Congress as well as registration forms can be found on the INTERNET at:
REGISTRATION

Internet
Instead of sending registration forms by mail or fax, participants are encouraged to register through the Internet. Registration Forms are available online. Please visit our website at: http://www.medicongress.com or http://www.efort.org or http://www.belgianorthoweb.be/efort for further details and action.

Important
Please note that registration for the 4th EFORT Congress closes on April 30, 1999. Applications received after this date will not be handled and will have to be resubmitted at the on-site registration desk of the Congress.

Registration Fees in BEF

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<td>Consultants</td>
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100 BEF = approx. 2.48 € and ± 2.95 US $

* certificate of training director or copy of student card or proof of occupation is mandatory

The registration fee includes

- participation in all scientific sessions, workshops, satellite symposia etc. of the 4th EFORT Congress
- access to the poster area, the scientific exhibits and the technical exhibition during the EFORT Congress and the Specialty Day
- the Congress bag with the programme, the abstract book, tourist information, etc.
- the EFORT Instructional Course Lecture Book volume 4, edited by EFORT and the Journal of Bone and Joint Surgery*
- the Congress documents with certificates of payment, a certificate of attendance, the badge, etc.
- participation in the Belgian Night on Saturday, June 5, 1999 (if applied for)
- free local public transport pass

* The Paris edition, volume 1 (12 £) and the Munich and Barcelona edition, volumes 2 and 3 (35 £ each) of the EFORT Instructional Course Lecture Book are still available at the Journal of Bone and Joint Surgery, 22 Buckingham Street, London, WC2N 6ET, UK

Important
Please note that registration for the 4th EFORT Congress closes on April 30, 1999. Applications received after this date will not be handled and will have to be resubmitted at the on-site registration desk of the Congress.
PAYMENT

Payment is to be made by
• Eurocheque in BEF payable to 4th EFORT Congress: only EUROCHEQUES are accepted
• Amexco – Visa – Mastercard - Diners
• Bank transfer   bank account number 001-3165587-68
   holder of account 4th EFORT Congress
   bank name        ASLK Bank
   bank address     Wolvengracht 48, 1000 Brussels
   swift number     CGAK BE BB
   all bank transfers must be free of charges to the receiver

Confirmation

Acknowledgement of registration and of receipt of payment will only be sent when both the registration form and payment in full are received. A free local public transport pass, a map of Brussels and a Sabena reduction voucher will be mailed together with the confirmation of registration.

Cancellations

Cancellations will be accepted until April 30, 1999. The full amount will be refunded less 2,500 BEF for consultants and less 1,500 BEF for residents, students and allied health professionals, to cover administration costs. No refunds will be made for cancellations received after this date. Cancellations are to be confirmed in writing.

Replacements

Name substitutions are accepted at any time at an extra charge of 1,000 BEF.

Certificates

All participants will receive a certificate of payment and a certificate of attendance at the Registration Desk of the Congress.

Important

Please note that registration for the 4th EFORT Congress closes on April 30, 1999. Applications received after this date will not be handled and will have to be resubmitted at the on-site registration desk of the Congress.
The location for the EFORT Congress will be the Brussels International Conference Centre (BICC) at the Brussels Exhibition Centre also known as the “Heizel”. It overlooks the city from a hill on its northern outskirts. The Brussels International Conference Centre is only minutes away from the city centre by “metro” and near to the Brussels international airport (Zaventem).

**Address**
Belgïeplein - Place de la Belgique, B-1020 Brussels, 📞 +32 (0)2 474 82 77, 📧 +32 (0)2 474 83 90

**Direct Lines during the Congress**
During the EFORT Congress the organisers can be reached at:
- 📞 +32 (0)2 474 85 07, 📧 +32 (0)2 474 82 07, congresses@medicongress.com

**Local Public Transport Pass**
All participants will receive a pass enabling them to use all local public transport free of charge during the EFORT Congress days.

**Surroundings**
Two hundred meters from the BICC, at the foot of the Atomium is Bruparck, a leisure centre including Mini-Europe with its 300 miniature European monuments and many restaurants, boutiques, tearooms and typical Belgian cafes recreating the atmosphere of old Brussels. Kinepolis, the world’s largest cinema complex with its 27 movie theatres and the King Boudewijn Sports Stadium are also located on this spot.

**Car Park**
The BICC offers parking facilities for 25,000 vehicles.
- When coming from Gent or Paris, take the northern ring and follow exit 7bis “Expo”.
- When coming from Antwerpen, Liège or Namur, follow direction Gent and take exit 7bis “Expo” of the northern ring. Signposts will indicate the car park reserved for the EFORT Congress.

**Food and Drinks**
The BICC has its own restaurants, located in the exhibition halls, where meals can be purchased at reasonable rates. Coffee counters and drink stations will be installed in various areas at the BICC.

**Disabled Persons**
The BICC as well as most of the 4 and 5 star hotels are fully accessible for disabled persons. Participants requiring assistance are kindly asked to inform the organisers.

**Business Centre**
A business centre with fax, email, copy and computer facilities is located in the registration area of the BICC.

**Bank Services**
A bank service will be available at the BICC. The opening hours will be announced in the Final Programme.

**Travel Agency**
A travel agency desk will be present in the registration area: travellers will be able to confirm flights, change itineraries and check the availability of return flights.

**Tourist Information**
A tourist information desk will also be available.

**Cloakroom**
A cloakroom is available. Luggage can also be stored here.

All recent information on the EFORT Congress as well as registration forms can be found on the INTERNET at:
GENERAL INFORMATION

Dates 3 – 8 June, 1999

Language The Congress language is English. There will be no simultaneous translation.

Accreditation The Belgian CME organisation allocated 120 accreditation units to the EFORT Congress.

Badge Participants and accompanying persons are obliged to wear the official congress badges on all occasions. There will be rigorous badge controls.

Exhibition A large exhibition highlighting medical devices, pharmaceutical products and books will take place in Hall 7 from Saturday till Tuesday. Exhibitors from all over the world will display and demonstrate their materials and specialised tools. Access is free for registered participants.

Liability By registering into the Congress and/or by participating in the exhibition joined to the Congress, participants and exhibitors agree that neither EFORT, the Organising Committee nor the Administrative Secretariat assume any liability. Participants and exhibitors are advised to organise their own health, travel and personal insurances.

Non-smoking Policy The 4th EFORT Congress will be a NON-SMOKING Congress. Smoking will be prohibited in all Congress areas and the exhibition.

Letter of invitation Upon request, the chairmen of the 4th EFORT Congress will be pleased to send a personal letter of invitation so as to enable participants to obtain supporting funds or visas for attending the Congress. This letter cannot be considered as an offer of financial support by the organisers.

Visa and Passports EC citizens only need their national identification papers. Citizens from most other countries will need a valid travel passport. They are encouraged to contact their local Belgian embassy or consulate to enquire about the necessity of visa application.

Climate The climate at the beginning of June usually is reasonably warm and sunny. An occasional shower, however, is possible.

Important Please note that registration for the 4th EFORT Congress closes on April 30, 1999. Applications received after this date will not be handled and will have to be resubmitted at the on-site registration desk of the Congress.
HOTEL RESERVATIONS

As Brussels will be very crowded during the Congress period, a large number of rooms in different categories of hotels have been booked at attractive group rates. Nearly all hotels are located in the city centre as this is more convenient for transport, shopping, sightseeing and dining. Participants can use their free local transport pass for travelling between the city centre and the Congress venue. HOTEXPO has been appointed as the official Housing Bureau of the Congress and all hotel bookings are to be made through HOTEXPO in order to benefit from the special group rates.

Hotexpo
Brussels Exhibition Centre
Belgiëplein - Place de la Belgique, B-1020 Brussels
✆ +32 (0)2 474 84 78, 📞 +32 (0)2 474 83 93, ✉ hotexpo@bitf.be, URL http://www.ib.be/hotexpo/

General conditions
As soon as the Hotel Reservation Form is received, a confirmation of hotel reservation and an invoice for the total amount will be returned by Hotexpo. This invoice has to be paid before March 1st, 1999. If not the reservation will be cancelled. For all reservations received after March 1st, 1999, the invoice has to be paid within 30 days.
For all reservations made after May 1st, 1999, payment by credit card is MANDATORY.
Upon receipt of payment, a voucher and a brochure of the hotel will be sent to the participant.
Participants are requested to pay their personal expenses directly to the hotel when checking out.
Please indicate on the Hotel Reservation Form if arrival at the hotel is scheduled after 18.00 hrs.
Rooms are allocated on a “first come, first served” basis.

Cancellation
Any cancellation more than a week prior to arrival will be reimbursed less BEF 1,500 administration charges.
No refund will be made for cancellation less than a week prior to arrival.

Payment
All payments can be made by Bank Transfer, Eurocheque or Credit Card and must be free of charge to the receiver.

Bank account
FIB/CREDIT GENERAL, Grote markt 5 Grand Place, 1000 Brussels, Belgium - Account n° 191 0276602-21, SWIFT: CREG BE BB

All hotel room information, city maps indicating the different locations of the hotels and booking forms are available on the INTERNET at http://www.ib.be/hotexpo/
## HOTELS AND RATES (in BEF)

### 1 Star category and student rooms

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All hotel room information, city maps indicating the different locations of the hotels and booking forms are available on the INTERNET at http://www.ib.be/hotexpo/
PRE AND POST CONGRESS TOURS

Amsterdam

Day 1: Bus trip to Amsterdam, optional tour of the canals. Guided walk through the historic city centre, followed by a welcome drink at the 4-star Victoria Hotel.

Day 2: Buffet breakfast and visit of the city of Volendam, famous for its harbour and its picturesque houses. At the beginning of this century, Volendam was a typical fishermen’s village. Nowadays, you can still sense how life was in former days. If you get lucky you can even meet some inhabitants wearing the traditional dress. Return trip to Brussels.

Rate per person: 6,780 BEF.
This rate includes transport, overnight stay at Hotel Victoria (double room) and buffet breakfast. Not included: meals, entrance fees.

The Champagne Region

Day 1: Bus trip to the Champagne region and stay at one of its famous Châteaux. In the evening, a four-course dinner will be served.

Day 2: Buffet breakfast, guided visit of the area and a famous champagne cellar. In the evening, there is a champagne reception followed by a gastronomic six-course dinner.

Day 3: Buffet breakfast and return trip to Brussels.

Rate per person: 16,950 BEF.
This rate includes transport, two nights’ stay at the Château (double room). Not included: entrance fees and meals that are not mentioned in the description.

Please contact Wonder Travel for booking of the Pré and Post Congress Tours. They can also prepare a personalised programme upon your request. Wonder Travel will also have a help desk at the Congress where flights can be confirmed and booked.

Wonder Travel
Mr. Luc Van Wassenhove
Van Aelbrouckstraat 8, 9620 Zottegem, Belgium
+32 (0)9 360 34 34, +32 (0)9 360 30 90, email: info@wonderreizen.be
TRAVEL

Sabena Official Carrier

Sabena is the “official carrier” of the 4th EFORT Congress.

Together with a confirmation of registration, participants will receive a Sabena Discount Voucher, which they have to present to their local Sabena agent in order to benefit from the discount offered.

![Sabena official carrier]

Airport Desk

For all assistance and information, an EFORT airport desk will be available upon arrival at Brussels International Airport (Zaventem). This desk will be located in the luggage pick-up area.

Travel Assistance

The official Travel Agency of the Congress will be Wonder Travel, Lic A 5603.

Wonder Travel will also have a help desk at the Congress where flights can be confirmed and booked.

Wonder Travel
Mr. Luc Van Wassenhove
Van Aelbrouckstraat 8, 9620 Zottegem, Belgium
📞 +32 (0)9 360 34 34,
👩‍💻 +32 (0)9 360 30 90
email: info@wonderreizen.be

All recent information on the EFORT Congress as well as registration forms can be found on the INTERNET at:
ACCOMPANYING PERSONS’ PROGRAMME

In order to participate in the tours mentioned below, accompanying persons have to register into the Congress.

Registration fee for accompanying persons

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>until 30/04/99</td>
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<tr>
<td>at the venue</td>
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The registration fee for accompanying persons includes

- the Congress documents as there are certificates of payment and the badge
- access to the Opening Ceremony followed by a Reception on Saturday, June 5, 1999
- free local public transport pass for the time of the Congress
- participation in the Belgian Night on Saturday, June 5, 1999
- access to the technical exhibition during the Congress

Registered accompanying persons and congress participants can book the following tours:

A complete accompanying persons’ programme has been developed with visits of Brussels and excursions (by bus) to Gent, Brugge and Antwerpen. The tours are guided by professional guides in Dutch, English and French.

TOUR 1: CLASSIC CITY TOUR OF BRUSSELS – HALF DAY (09.00 – 12.00 HRS)
Guided walk and visit to the Grand’ Place. Afterwards a bus tour around the Brussels Avenues and boulevards the Place of Justice, the Atomium, Bruparck, the Chinese Pavilion, the Royal Greenhouses, the Parliament and the Sablon district (antiquaries) and the European Community headquarters is scheduled.
Rate: Early: 1,500 BEF – Late: 1,600 BEF – At the venue: 1,700 BEF

TOUR 2: CLASSIC CITY TOUR OF BRUSSELS – FULL DAY (09.00 – 17.00 HRS)
The excursion starts with a short walk to the Grand’ Place, the St Hubert Galleries and the Cathedral of St. Michael. In the afternoon visit the majestic Cathedral of Koekelberg, the fifth largest church in the world, and the Atomium. Of course a visit of the Manneken Pis statue (symbol of the Brussels EFORT Congress) is also scheduled.
Rate: Early: 1,850 BEF – Late: 1,900 BEF – At the venue: 2,000 BEF
TOUR 3: GENT – FULL DAY (09.00 – 18.00 HRS)
After an hour’s drive, we arrive in Gent where we will visit the St Bavo Cathedral with a crypt dating from 941. This cathedral also houses the celebrated Gent Altarpiece (1432) painted by the Flemish Van Eyck brothers.
Important Middle Age buildings such as the Belfry and the Castle of the Counts will be visited.
Rate: Early: 1,800 BEF – Late: 1,900 BEF – At the venue: 2,000 BEF

TOUR 4: BRUGGE – FULL DAY (08.30 – 18.00 HRS)
Also called the « Venice of the North », Brugge has more than 50 bridges. A boat trip on the enchanting canals is part of the excursion as are visits to 13th century Halls and Belfry, the Chapel of Holy Blood, the 12th century hospital of St.-Jan, the Beguinage and the Lake of Love.
Rate: Early: 2,000 BEF – Late: 2,200 BEF – At the venue: 2,400 BEF

TOUR 5: GENT AND BRUGGE – FULL DAY (08.30 – 18.00 HRS)
A combination of all the splendours of the two cities is offered to participants with limited time to spend.
Rate: Early: 2,200 BEF – Late: 2,400 BEF – At the venue: 2,600 BEF

TOUR 6: ANTWERPEN, FASCINATING CITY ON THE RIVER SCHELDE – FULL DAY (09.00 – 18.00 HRS)
Antwerpen, Cultural Capital of Europe in 1993, has many memories of its rich past. Above all it is the city of P.P. Rubens, worldfamous master of the 17th century. We drive to the Market Place with its ancient houses and the Cathedral of Our Lady (entrance fee included). This cathedral contains amongst other treasures, two of Rubens’ masterpieces. Antwerp is also the world’s diamond center and a visit of a Diamond shop is part of the programme.
Rate: Early: 2,200 BEF – Late: 2,400 BEF – At the venue: 2,600 BEF

TOUR 7: WATERLOO AND GAASEBEEK – HALF DAY (13.30 – 18.00 HRS)
Through the residential outskirts of Brussels we drive to Waterloo. On the famous battlefield we visit the historical farmsteads as well as the monuments erected by the nations participating in the battle.
Visit to the panoramic painting and the Visitors’ centre with an audio-visual reconstruction of the Battle are optional. Sufficient time will be left to climb the Lion-Hill.
On the way back a visit to the Castle of Gaasbeek, with important collections of furniture, porcelain, silverware, tapestries and arms from the 15th and 16th century.
Rate: Early: 1,600 BEF – Late: 1,700 BEF – At the venue: 1,800 BEF
**TOUR 8: DINANT – FULL DAY (08.30 – 18.00 HRS)**

The picturesque small city of Dinant is located on the river Meuse and is renowned for its castle located on a rock overlooking the city. A visit to the cave La Merveilleuse and a boat trip are part of this excursion.

Rate: Early: 2,000 BEF – Late: 2,200 BEF – At the venue: 2,400 BEF

**TOUR 9: SEMOIS VALLEY**

Via Florenville, Mortehan and Herbeumont we drive to Orval (famous for its abbey beer) where a visit to the abbey is scheduled. Guided tour through the ruins which will stimulate your imagination. Tasting of beers, cheese and bread of the region is also provided. Visit of typical Ardennes villages as Bouillon, Corbion, Poupehan and Rochehaut are part of the programme.

Rate: Early: 2,400 BEF – Late: 2,600 BEF – At the venue: 2,800 BEF

**TOUR 10: LAND OF HERVE**

This is really a trip for gourmands. After an audio-visual show about the cheese and syrup made in the typical „Land of Herve“ we will visit the Jacques Museum. This is one of Belgian’s famous chocolate factories where you will be shown how the cacao bean becomes chocolate. Return along Henri Chapelle, the American Military Cemetery and possible visit to the brewery cider „Ruwet“.

Rate: Early: 2,400 BEF – Late: 2,600 BEF – At the venue: 2,800 BEF

**General Tour Information**  All tours will take place on Saturday, Sunday, Monday and Tuesday. Please indicate your day of reservation on the registration form.

**Confirmation**  Acknowledgement of registration in the partners’ programme and of receipt of payment will only be sent when both the registration form and payment in full are received.

**Cancellations**  Cancellations are accepted until April 30, 1999. The full amount will be refunded less 1,000 BEF covering administration costs. No refunds are made for cancellations received after this date. Cancellations are to be confirmed in writing.

**Replacements**  Name substitutions are accepted at any time at an extra charge of 500 BEF.

**Important**  The organisers reserve the right to cancel tours in case of insufficient attendance. In this case participants will be informed in advance and fully refunded. Lunches are not included. Please inform Medicongress before April 30, 1999 in case of special dietary requirements.
MAP CONGRESS VENUE
Publuciteit
Sulzer