



June 3 - 8, 1999
Brussels

E F O R T

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

Third Announcement & Preliminary Programme

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PARTICIPATING NATIONAL SOCIETIES OF ORTHOPAEDICS AND TRAUMATOLOGY

Austria	OGO	Österreichische Gesellschaft für Orthopädie und Orthopädische Chirurgie
Belgium	BVOT	Belgische Vereniging voor Orthopedie en Traumatologie
	SOBCOT	Société Belge de Chirurgie Orthopédique et de Traumatologie
Croatia	COTA	Croatian Orthopaedic and Traumatology Association
Cyprus	COA	Cyprus Orthopaedic Association
Czech Republic	COTS	Czech Orthopaedic and Traumatology Society
Denmark	DOS	Danish Orthopaedic Society
Finland	SOY / OFF	Finnish Orthopaedic Association
France	SOFCOT	Société Française de Chirurgie Orthopédique et de Traumatologie
Germany	DGOT	Deutsche Gesellschaft für Orthopädie und Traumatologie
Greece	HAOST	Hellenic Association of Orthopaedic Surgery and Traumatology
Hungary	MOT / HOA	Magyar Ortoped Tarsasag
Iceland	FIB	Felag Islenskra Baeklunarlaekna
Ireland	IOA	Irish Orthopaedic Association
Italy	SIOT	Società Italiana di Ortopedia e Traumatologia
Lithuania	LTOD	Lietuvos Traumatologu Ortopedu Draugija
Luxemburg	SLO	Société Luxembourgeoise d'Orthopédie et de Traumatologie
Macedonia (FYROM)	MAOT	Macedonian Association of Orthopaedics and Traumatology
Netherlands	NOV	Nederlandse Orthopedische Vereniging
Norway	NOF	Norsk Ortopedisk Forening
Poland	P.T.O.iTr.	Polskie Towarzystwo Ortopedyczne i Traumatologiczne
Portugal	SPOT	Sociedade Portuguesa de Ortopedia e Traumatologia
Romania	SOROT	Societatea Romana de Ortopedie et Traumatologie
Slovakia	SOTS	Slovakian Orthopaedic Society
Slovenia	OTSS	Ortopedsko Traumatoloska Sekcija Slovenia
Spain	SECOT	Sociedad Española de Cirugía Ortopédica y Traumatología
Sweden	SOF	Svensk Ortopedisk Forening
Switzerland	SGO / SSO	Schweizerische Gesellschaft für Orthopädie
Turkey	TOTBD	Türk Ortopedi ve Traumatoloji Birliği Derneği
United Kingdom	BOA	British Orthopaedic Association
Yugoslavia	YAOST	Yugoslavian Association of Orthopaedic Surgery and Traumatology

Observer

Bulgaria	BOTA	Bulgarian Orthopaedic and Traumatology Association
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Associate Scientific Member

Israel	IOA	Israel Orthopaedic Association
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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

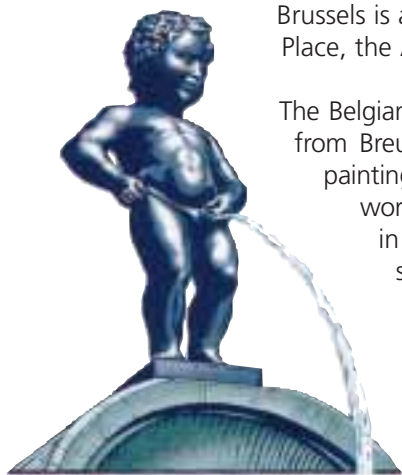
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All recent information on the EFORT Congress as well as registration forms can be found on the INTERNET at:
<http://www.medicongress.com> or <http://www.efort.org> or <http://www.belgianorthoweb.be/efort>

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

President	Otto Sneppen (DK)
Vice-President	Paolo Gallinaro (I)
Secretary	Anthony Catterall (UK)
Treasurer	Wolfhart Puhl (D)
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	Franz Langlais (F)
Editorial Secretary	Jacques Duparc (F)
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Chairman of the 1999 Congress	Pierre-Paul Casteleyn (B)
President Orthopaedic Section UEMS	Marc Speeckaert (NL)

Organising Committee EFORT Congress 1999

Chairman	Pierre-Paul Casteleyn (B)
President BVOT 1999	Leo Cuypers (B)
President SOBCOT 1999	Jean-Jacques Rombouts (B)
Liaison Scientific Committee	Roger Lemaire (B)
Liaison Specialty Societies	Louis Lootvoet (B)
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	Roger Lemaire (B)
	Luis Munuera-Martinez (E)
	Karl-Göran Thorngren (S)

Organising Secretariat

MEDICONGRESS

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During the EFORT Congress (June 3 – June 8)
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CONGRESS SCHEDULE

	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
MORNING		EORS	EORS EAMST ARTOF	EFORT Instructional Course Lectures Free Paper Sessions OPENING CEREMONY	Specialty Day EPOS EFAS EBJIS ESSKA-EFOST ESSSE FESSH EHS	EFORT Instructional Course Lectures Free Paper Sessions BELGIAN SESSION	EFORT Instructional Course Lectures Free Paper Sessions AWARDS CEREMONY
				Workshops and Satellite Symposiums by the Industry			
AFTERNOON		EORS	EORS EAMST ARTOF	EFORT Specialised Symposiums Free Paper Sessions	Specialty Day EPOS EFAS EBJIS ESSKA-EFOST ESSSE EHS	EFORT Specialised Symposiums Free Paper Sessions	EFORT Specialised Symposiums Free Paper Sessions
				Workshops and Satellite Symposiums by the Industry			
EVENING	EORS Registration Welcome Drink	EORS Wine and Cheese Evening	EORS Banquet at Concert Noble	EFORT Belgian Night at Heizel	EFORT Banquet at Autoworld		

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.



PUB WALDEMAR LINK

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Wednesday, June 2

18.00 – 21.00 Registration and Welcome Drink

Thursday, June 3

07.00 Registration

07.45 Opening Ceremony

room A

08.00 Session I:
Joint Replacement Hip

09.30 Break

10.00 Mario Boni Award

10.30 Instructional Course:
Tissue Engineering

11.30

12.00 Lunch Break

13.30 Session IV:
Joint Replacement Knee

15.00 Break

15.30 Poster Session

16.30 Session VI:
Implant Wear

18.00 Poster Session

Wine and Cheese Reception

room B

Session II:
Fracture Healing

Break

Session III:
Bone Biology

Workshop
Implant Image Analysis

Lunch Break

Session V:
Soft Tissue Biology

Break

Poster Session

Session VII:
Osteoarthritis

Poster Session

Friday, June 4

room A

08.00 Session VIII:
Biomaterials

09.30 Break

10.00 Instructional Course:
Implant Wear

11.30 General Assembly EORS

12.00 Lunch Break

13.30 Session XI:
Cartilage

15.00 Break

15.30 Session XIII:
Knee

17.00 Closing Ceremony & Poster Award

20.00 Banquet at the 'Concert Noble'

room B

Session IX:
Biomechanics

Break

Session X:
Computer Aided
Techniques

Poster Session

Lunch Break

Session XII:
Spine

Break

Session XIV:
Miscellaneous

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Brussels

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

9th Conference of the

EAMST

EUROPEAN ORTHOPAEDIC RESEARCH SOCIETY – EORS

Wednesday, June 2

18.00 – 21.00 Registration and Welcome Drink

Thursday, June 3

room A

Session I: Joint Replacement Hip

- 08.00** Influence of the extra-medullary 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. Plenck jr (Vienna)
- 09.30** Break
- 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. Lyrilis (Athens)
- 09.15** The effects of nicotine on fracture healing in rats
H. Yorgancigil, 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
M. Levy, H. Simpson, J. Kenwright, M. Francis (Oxford)
- 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.F. 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, PS. 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. Kärrholm, L. Carlsson, L. Regnér, 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
- 15.30** Poster Session

Session V: Soft Tissue Biology

- 13.30** The influence of soft tissue constraint on the mechanical performance of different TKR designs
J. Desjardins, PS. 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. Südkamp (Berlin)
- 14.00** Fibrocartilage in the transverse ligament of the human atlas
S. Milz, T. Schlüter, R. Putz, J.R. Ralphs, M. Benjamin, (Munich & Cardiff)
- 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
G. Köster, C.H. Lohmann, D.D. Dean, Z. Schwartz, B.D. Boyan (Göttingen)
- 18.00** Poster Session
- Wine and Cheese Evening

Session VII: Osteoarthritis

- 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
D. Tigani, GA. Guzzardella, G. Barbanti, D. Ferrari, P. Toricelli, G. Morrone, M. Rocca, M. Fini, R. Giardino (Bologna)
- 17.00** Oxygen free radicals and nitric oxide play important roles in the injury mechanism of degenerative joint diseases
U. Haklar, U. Haklar, M. Yüksel, A. Polat, A. Velidolu, M. Turkmen, AS. Yalcin (Istanbul)
- 17.15** Calcitonin inhibits evolution of osteoarthritic (OA) lesions, an experimental study in rabbits
N. Papaioannou, N. Krallis, L. Khaldi, Gr. Skarantavos, G.P. Lyrilis (Athens & Kiffissia)
- 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
M. Lind, S. Overgaard, Y. Song, TB. Jensen, SB. Goodman, C. Bünger, K. Søballe (Aarhus & Stanford)
- 08.30** Comparison between bone mineral density and mechanical properties of impacted allograft and HAP granules implanted in bone defect
Y. Hiroshi, H. Ohashi, Y. Kadoya, A. Kobayashi, Y. Yamano, Y. Tanabe, H. Maki, T. Meguro (Osaka)
- 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. Rüeggsegger (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

room A

10.00 Instructional Course: Implant Wear
E. Schneider

11.30 General Assembly EORS

12.00 Lunch Break

Friday, June 4

room B

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



Friday, June 4

room A

Session XI: Cartilage

13.30 Importance of mechanical conditions on osteochondral defect healing

G. Duda, R. Reinmann, J. Burns, M. Heller, G. Schmidmaier, H. Bail, S. Kolbeck, K. Stosch-Wiechert, M. Raschke, NP. Haas (Berlin)

13.45 Determination of subchondral plate advancement in healing osteochondral defects

Y. Qiu, BF. Shahgaldi, FW. Heatley (London)

14.00 Arthroscopic measurement of articular cartilage stiffness

T. Lyyra, I. Kiviranta, M. Niinimäki, J. Töyräs, H.J. Helminen, J.S. Jurvelin (Kuopio)

14.15 Chondrocyte growth on tricalciumphosphate

S.J.W. Koch, C. Niedhart, T. Wahner, U. Maus (Aachen)

14.30 Culture of chondrocytes in alginate-collagen gels

B. Müller, S. Rupp, R. Seil, V. Dindoyal, D. Kohn (Homburg)

14.45 Linkage of chondroitin-sulfate to a type 1 collagen scaffold stimulates the proliferation rate and matrix production of seeded chondrocytes in vitro

J.L.C. Van Susante, J. Pieper, P. Buma, TH. van Kuppevelt, HM. van Beuningen, PM. vander Kraan, JH. Veerkamp, (Nijmegen)

15.00 Break

Friday, June 4

room B

Session XII: Spine

13.30 Load distribution in vertebral bodies is an indication of osteoporosis

J. Homminga, H. Weinans, W. Gowin, D. Felsenberg, R. Huiskes (Nijmegen, Rotterdam & Berlin)

13.45 Compressive force transmission in the human cervical spine: effect of superimposed flexion and extension postures

P. Crompton, GA. Dumas, LP. Nolte (Bern & Kingston)

14.00 Lumbosacral remodelling in experimental spondylolisthesis

H. Österman, D. Schlenszka, K. Österman (Helsinki)

14.15 Motor cortical hyperexcitability and scoliotic spinal deformity in rats with experimentally induced sensory hemisection

C. Barrios, J. Domenech, C. Barrios, JA. Barcia, A. Pascual-Leone (Valencia)

14.30 Kinematic intervertebral spacer for the cervical spine

R.J. Sabitzer, FK. Fuss (Vienna)

14.45 Computer simulation of transpedicular spinal surgery

D. Scale (Frankfurt)

15.00 Break



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, J.P. Huskin, J.M. Crielaard (Liège)
- 16.00** The trajectory of the human knee joint
G. Krakovits, Z. Juhasi, 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
- 20.00** 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 immunosuppression 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)



General Information

Chairman Organising Committee

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EORS Membership

During the EORS Congress, you will be able to apply for EORS membership.

You can also submit an application for EORS membership to the EORS Secretariat, Dr. H. Kienapfel, Klinik für Orthopädie, Phillips-Universität Marburg, Baldinger Strasse, D-35033 Marburg, Deutschland.

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.

Registration and Fees (in BEF)

100 BEF = 2,48 € = ± 2,95 \$

	until April 30	at the venue
Members	10,000	11,000
Non-Member	12,000	14,000
Banquet	2,250	2,500

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

room C

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):

	Before 30.04.99	At the venue
members EAMST - EATB	3,500	4,500
non members	4,000	4,500



EFORT – SATURDAY – PROGRAMME AT A GLANCE

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

	room 1	room 2	room 3	room 4	room 5	room 6	room 7	room 8	room 9	room 10
08.15	ICL: Methodology of outcome studies of the hip D. Murray (UK)	ICL: Ilizarov technique updated M. Catagni (I)	ICL: Changing concepts in the surgery of hallux valgus B. Valtin (F)	ICL: Treatment of metastatic disease of bone R. Capanna (I)	ICL: New concepts for bone substitution N. Passuti (F)	ICL: Pathology of the tendon of the long head of biceps and the rotator interval H. Resch (A)	ICL: Tendon injuries and overuse syndromes S. Orava (SF)	ICL: Diagnosis and treatment of osteoporosis for orthopaedic surgeons W.A. Wallace (UK)		
09.15	Break									
09.30	FPS: THR migration studies	FPS: Osteogenesis	FPS: Hallux valgus	FPS: Bone metastases	FPS: Bone grafts/ substitutes	FPS: Shoulder impingement	FPS: Achilles tendon	FPS: Spine: Miscellaneous	FPS: Arthroscopy assisted fracture treatment	FPS: Foot: tendons, plantar fascia
10.30	Break									
10.45										
	Opening Ceremony									
12.00	Lunch Break – Workshops and Satellite Symposiums by the Industry									
14.00	SS: Orthopaedic registers: European standard of every-day practice – a joint responsibility	SS: Treatment of extracapsular hip fractures	SS: Does rotation matter in TKR?	SS: Fractures of the distal radius	SS: Treatment of 3- and 4-part fractures of the proximal humerus	SS: Cartilage repair	FPS: Hand surgery: Miscellaneous	FPS: High tibial osteotomy	FPS: Ankle joint	FPS: Trauma - fractures
15.30	Break									
15.45	FPS: THR - femur	FPS: Inter- and subtrochanteric fractures	FPS: Knee kinematics	FPS: Distal radius fractures	FPS: Humerus - fractures	FPS: Osteochondritis dissecans - cartilage	FPS: Joint infection	FPS: Femoropatellar joint	FPS: Ankle sprain	FPS: Bone tumour surgery
16.45	Break									
17.00	FPS: Cementless THR	FPS: Pelvis - fractures	FPS: Knee replacement	FPS: Elbow: Miscellaneous	FPS: Shoulder	FPS: Vascularised bone grafts	FPS: Bone and joint infection	FPS: Knee osteoarthritis	FPS: Ankle - fractures	FPS: Bone imaging
18.00	Workshops and Satellite Symposiums by the Industry									

Belgian Night – Hall 12



E F O R T

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

June 3 - 8, 1999
Brussels

Saturday, June 5

Saturday, June 5

room 1

08.15 Instructional Course Lecture
Methodology of outcome studies of the hip
D. Murray (UK)

09.15 Break

09.30 Free Paper Session
THR migration studies

- 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)
- Migration measurement of femoral components in total hip arthroplasty - accuracy of EBRA-FCA
Biedermann R., Krismer M., Stöckl B., Ornstein E., Franzén H. (A & S)
- Migration patterns of femoral components. Frequency and prediction of revision
Krismer M., Biedermann R., Stöckl B., Haid Ch., Fischer M. (A)
- Increased migration of the SHP stem
Nivbrant B., Kärrholm J., Söderlund P. (S)
- Two year migration results of the Duraloc cup
Stoeckl B., Wimmer C., Krismer M., Landauer F., Nogler M. (A)
- Migration measurement of two acetabular components
Eckardt A., Schwitalle M., Heisel C., Seeleitner C., Heine J. (D)

10.30 Break

10.45 Opening Ceremony

12.00 Lunch Break

Saturday, June 5

room 2

08.15 Instructional Course Lecture
Ilizarov technique updated
M. Catagni (I)

09.15 Break

09.30 Free Paper Session
Osteogenesis

- 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)
- Segmental transport utilizing cable wires and pulleys mounted on an Ilizarov frame - A new technique
Weber M., Siebert C.H., Heller K.D., Birnbaum K., Kaufmann A.M. (D)
- Indication for the change from unilateral to Ilizarov ring fixator
Schwer E.H., Siebert C.H., Kaufmann A.M., Wilke M., Weber M. (D)
- 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 & HK)
- 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)
- 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)

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.



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.



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
Turner T.M., Urban R.M., Gitelis S., Haggard W.O., Parr J.E. (USA)
- 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

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., Schüller 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., Schwyzer 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

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
Tendon injuries and overuse syndromes
S. Orava (SF)

09.15 Break

09.30 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., Moyon 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)

10.30 Break

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

09.15 Break

09.30 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)

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.



09.30 Free Paper Session

Arthroscopy assisted fracture treatment

- 2 year follow-up of tibial plateau fractures treated with arthroscopic assisted surgery
Jansen N., D'Anvers J., Van Glabbeek F., Van Leemput T., Verstreken J. (B)
- Arthroscopic treatment of tibial plateau fractures
Schiavone Panni A., Tartarone M., Del Torto M., Patricola A. (I)
- Arthroscopic treatment of tibial plateau fractures: report of 26 cases
Beaufils Ph., Cassard X., Hardy P. (F)
- Arthroscopic findings in acute ankle fractures
Hintermann B., Lampert C., Stutz G., Regazzoni P., Gächter A. (CH)
- Arthroscopy in ankle fracture treatment
Boss A., Hintermann B. (CH)

10.30 Break**09.30** Free Paper Session

Foot: tendons, plantar fascia

- Hick's revisited: a weight-bearing in vivo study of the biomechanics of the plantar fascia employing 'dynamic' MRI
Vedi V., Williams A., Singh D., Gedroyc W., Hunt D. (UK)
- Extracorporeal shock wave therapy for plantar heel pain
Schoellner C., Riedel C., Schwitalle M., Rompe J.D., Heine J. (D)
- Mechanical versus electromagnetic energy generation in extracorporeal shock wave therapy (ESWT) of plantar fasciitis
Lohrer H., Schöll J., Hirschmann M. (D)
- Does tibialis posterior tendon transfer for active dorsiflexion of the foot inevitably result in an acquired flatfoot deformity?
Yeap J.S., Singh D., Birch R. (UK)
- Lateral column lengthening and medial soft tissue reconstruction for treatment of acquired flatfoot deformity associated with posterior tibial tendon insufficiency
Hintermann B., Valderrabano V., Kundert H.P. (CH)
- Flatfoot: its relation to accessory navicular and the tibialis posterior tendon
Kiter E., Karatosun V., Gunal I. (TR)

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.



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
Santorì 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 trochantero-diaphyseal area
Grosse A. (F)
- Intertrochanteric fractures: endoprosthetic replacement
Broos P. (B)

15.30 Break

Saturday, June 5

room 3

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

Saturday, June 5

room 4

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. Hutten (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
Hutten 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., Moyon B. (F)
- Prolonged peroneal nerve dysfunction after high tibial osteotomy - Pre and postoperative electrophysiological study
Semih A., Cullu E., Araç N., Varolgünes N., Sur H. (TR)
- 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., Thermann 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., Kicking 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
Bülent A., Tokgozoglu A.M., Oznur A., Alpaslan A.M. (TR)
- An analysis of fretting damage seen on explanted femoral stems
Howell J., Ling R.S.M. (UK)

16.45 Break**15.45** Free Paper Session
Inter- and subtrochanteric fractures

- The proximal femoral nail (PFN) and the dynamic hip screw (DHS): a prospective clinical trial
Saudan M., Lubecke-Wolff A., Sadowski C., Riand N., Hoffmeyer P. (CH)
- Intramedullary hip screw (IMHS) versus compression hip screw plate (CHSP) for intertrochanteric hip fractures - a prospective, randomized trial of 160 patients
Hardy D., Delince Ph. (B)
- Preliminary results with use of standard and modified IMHS nail in the treatment of peritrochanteric fractures
Maniscalco P., Bertone C., Rivera F., Voglino N. (I)
- The treatment of unstable intertrochanteric fractures: medial displacement osteotomy versus anatomical nailing
Papanikolaou A., Deimedes G., Lochovitis K., Darmanis S., Antoniou N. (GR)
- Extramedullary fixation of 107 subtrochanteric fractures - A randomized multicenter trial of the Medoff sliding plate vs three different screw-plate systems
Lunsjö K., Ceder L., Skytting B., Larsson B.-E., Allvin I. (S)

16.45 Break

15.45 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 arthrotic 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
Tokgozoglul A.M., Atilla B., Dagdeviren A., Atilla P., Alpaslan A.M. (TR)
- Late vs. early engagement of posterior stabilized prostheses: effect on extensor moment arm and resulting patellofemoral loads
Lombardi A.V., Mallory T.H., Fada R.A., Adams J.B., Kefauer C.A. (USA)

16.45 Break

15.45 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)

16.45 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 (trochleaplasty)
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., Farkas T., 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
Krips R., van Dijk C.N., Halasi T., Jarvinen M., Lanzetta A. (NL, H, SF & I)
- 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
Waterman J., Haddad F.S., Gould J., Briggs T.W.R., Cannon S.C. (UK)
- 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
Ayoub K.S., Fiorenza F., Tillman R.M., Carter S.R., Grimer R.J. (UK)
- 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., Dungal 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)



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 arthrolisis 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)

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
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., Gröbl 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**
Van Dijk M., Wuisman P.I.J.M., Winters H.A.H. (NL)
- **The free vascularized fibular graft in reconstruction of skeletal defects**
Zalavras Ch.G., Malizos K.N., Mavrodontidis A., Beris A., Soucacos P.N. (GR)



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**
Bruns 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**
Prakash U., Wigderowitz C.A., McGurty D., Rowley D.I. (UK)
- **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., Bellyei 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)

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
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
Hernandez J.A., Rodriguez D., Garreta J.L., Jimeno F.J., Fernandez Sabate A. (E)
- Results of surgical treatment of displaced pilon fractures
Stojkovska E., Saveski J., Todorov I., Velkovski G., Andonovski Z. (MAC)
- Minimally invasive treatment for ankle fractures associated with severe soft tissue injury
Dendrinou G., Anastopoulos G., Kontos S. (GR)

17.00 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	Room 2	Room 3	Room 4	Room 5	Room 6
MORNING	EPOS European Paediatric Orthopaedic Society	EFAS European Foot and Ankle Societies	EHS European Hip Society	FESSH Federation of the European Societies for Surgery of the Hand	ESSSE European Society for Surgery of the Shoulder and the Elbow	EFOST & ESSKA European Society of Sports Traumatology, Knee Surgery and Arthroscopy
	Workshops and Satellite Symposia by the Industry					
AFTERNOON	EPOS European Paediatric Orthopaedic Society	EFAS & EBJIS European Bone and Joint Infection Society	EHS European Hip Society		ESSSE European Society for Surgery of the Shoulder and the Elbow	EFOST & ESSKA European Federation of Orthopaedic Sports Traumatology
	Workshops and Satellite Symposia by the Industry					
EVENING	EFORT Banquet at Autoworld					

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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

Sunday, June 6 — Specialty Day

Sunday, June 6

room 1

EPOS

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. BENSANEL

- 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

EPOS EUROPEAN PAEDIATRIC ORTHOPAEDIC SOCIETY

Sunday, June 6

room 1

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

EPOS EUROPEAN PAEDIATRIC ORTHOPAEDIC SOCIETY



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., Mátyus 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)



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**
Banks 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., Kokoroghiannis 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

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 shoemakers
 - 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., Pliotopoulos A., Lochovitis C., Aperijs E. (Gr)
- **Fractures of the foot and ankle in car drivers and passengers – incidence analysis and long-term results**
Richter M., Therrmann H., Schrat H.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 Tschauner (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
Morsellised graft
Bulk allograft

G. Poilvache
I. Learmonth
M. Kerboul
- **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

C. Picault
R. Ganz
K. Steinbrink



Sunday, June 6

room 4

FESSH

FRACTURES OF THE DISTAL RADIUS

Moderators: F. Schuind, L. De Smet

- 08.00** Anatomy of the distal radius
M. Rooze (Brussels, Belgium)
- 08.15** Biomechanics of the wrist
F. Schuind (Brussels, Belgium)
- 08.25** The importance of the distal radio-ulnar joint in distal radial fractures
D.V.C. Stoffelen, P. Broos (Leuven, Belgium)
- 08.35** Ulnar variance: may it be more or less ?
E. Thienpont, L. De Smet, G. Fabry (Leuven, Belgium)
- 08.45** Discussion
- 08.55** Epidemiology of distal radial fractures
M.M. McQueen (Edinburgh, UK)
- 09.05** Classification of distal radial fractures
D. Hardy, Ph. Delincé (Brussels, Belgium)
- 09.15** An experimental approach and clinical evaluation of distal radial fractures
D.V.C. Stoffelen, P. Broos (Leuven, Belgium)
- 09.30** Prediction of instability of fractures of the distal radius
M.M. McQueen (Edinburgh, UK)
- 09.45** Discussion
- 09.55** Coffee break
- 10.15** Comparison of orthopaedic and operative treatments
P. Broos (Leuven, Belgium)
- 10.30** Twenty years experience of external fixation
F. Burny, M. Donkerwolcke, F. Moulart (Brussels, Belgium)
- 10.40** Metaphyseal external fixation or external fixation in general
M.M. McQueen (Edinburgh, UK)

Sunday, June 6

room 4

- 10.50** The treatment of the distal radius fractures with "Arum" pins as intra-focal pinning
A. Kapandji (Longjumeau, France)
- 11.00** Anterior plating for Barton fractures
P. Broos (Leuven, Belgium)
- 11.10** Evaluation and treatment of associated carpal ligament injuries with fractures of the distal radius
D.L. Fernandez (Berne, Switzerland)
- 11.20** Discussion
- 11.30** Corrective osteotomies of the distal radius
D.L. Fernandez (Berne, Switzerland)
- 11.40** Intra-articular osteotomies for intra-articular distal radius malunion
Ph. Saffar (Paris, France)
- 11.50** Sauvé Kapandji procedure
L. De Smet (Leuven, Belgium)
- 12.00** Ruptures of the extensor pollicis longus
L. Clairbois, P. Ducarmois, F. Van Innis (Charleroi, Belgium)
- 12.10** Posttraumatic reflex sympathetic dystrophy and pseudodystrophy
M.F. Driessens (Edegem, Belgium)
- 12.20** Discussion



Sunday, June 6

room 5

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 CUFF TEAR

11.00 P. Habermeyer, Heidelberg (D)

11.15 Moderator: J.P. Warner, Boston (USA)

11.30 Discussion

Sunday, June 6

room 5

Session 5: HOW I TREAT A MASSIVE AND IRREPARABLE CUFF 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

14.00 G. Declercq, Antwerpen (B)

14.15 Moderator: R. Minola, Milano (I)

14.30 Discussion

Session 7: HOW I TREAT SLAP LESIONS

14.40 J.F. Kempf, Strasbourg (F)

14.55 Moderator: A. Castagna Milano (I)

15.10 Discussion

15.20 Break

Session 8: HOW I TREAT ANTERIOR CHRONIC POST-TRAUMATIC SHOULDER INSTABILITY

15.40 D.F. Gazielly, Saint Etienne (F)

15.55 P. Gleyze, Colmar (F)

16.10 H. Resch, Salzburg (A)

16.25 Moderator: J.P. Warner, Boston (USA)

16.35 Discussion

CONCLUSIONS

16.45 D.F. Gazielly, Saint Etienne (F)



Sunday, June 6

room 6

EFOST-ESSKA

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)

Sunday, June 6

room 6

Third session: Rehabilitation

- 11.45** Comparison of outcome measurements during rehabilitation after ACL reconstructions
A. Ekeland (N)
- 12.00** A "matched" prospective randomized study of closed chain versus open chain rehabilitation after ACL-reconstruction. Can open chain speed up return to sports?
E. Eriksson (S)
- 12.15** Overview of rehabilitation techniques
P. Renström (S)

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
Dimitar 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)



General Information

Registration and Fees (in BEF)

100 BEF = 2,48 € = ± 2,95 \$

	until April 30	at the venue
EFAS & EBJIS	4,000	4,500
EBJIS	2,500	3,000
EHS	4,000	4,500
EPOS	4,000	4,500
ESSKA & EFOST	4,000	4,500
ESSSE	4,000	4,500
FESSH	2,500	3,000

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

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- Eurocheque in BEF payable to the 4th EFORT Congress
- Amexco – Visa – Eurocard - Diners
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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.

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

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.



EFORT – MONDAY – PROGRAMME AT A GLANCE

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

	room 1	room 2	room 3	room 4	room 5	room 6	room 7	room 8	room 9	room 10
08.15	ICL: Biology of prosthetic loosening in the hip H.-G. Willert (D)	ICL: Bone oedema, focal transient osteoporosis S. Hofmann (A)	ICL: Basic kinematics of knee stability A. Amis (UK)	ICL: Management of malignant soft tissue tumours A. Taminiau (NL)	ICL: Indications for surgery in cerebral palsy M. Guillaumat (F)	ICL: Limited invasive surgery of the lumbar spine C. Bünger (DK)	ICL: Disorders of the distal radio-ulnar joint D. Fernandez (CH)	FPS: Shoulder calcifications	FPS: Malignant bone tumours	FPS: Paediatric Orthopaedics: Perthes/epiphysiolysis
09.15	Break									
09.30	FPS: Basic knowledge on THR	FPS: Avascular necrosis	FPS: Anterior cruciate ligament	FPS: Bone tumours: diagnosis	FPS: Paediatric Orthopaedics: miscellaneous	FPS: Pedicular screws	FPS: Hand/wrist	FPS: Elbow - trauma	FPS: Spine - tumours	FPS: Paediatric Orthopaedics: developmental dysplasia of the hip
10.30	Break									
10.45										
	Belgian Research Session									
12.00	Lunch - Workshops and Satellite Symposiums by the Industry									
14.00	SS: The cemented stem in primary THR	SS: Paediatric trauma affecting the physis	SS: Lumbar intervertebral cages	SS: Anterior shoulder instability: the bony Bankart lesion	SS: Classifications of idiopathic scoliosis and their value for instrumentation patterns	SS: Fractures and nonunion of the scaphoid bone	FPS: Cementless THR	FPS: The femoropatellar joint in TKR	FPS: Meniscus transplantation	FPS: Femoropatellar joint
15.30	Break									
15.45	FPS: Cemented THR	FPS: Paediatric Orthopaedics: miscellaneous	FPS: Spine fusion	FPS: Shoulder-instability	FPS: Idiopathic scoliosis	FPS: Lunate/scaphoid bone	FPS: Cementless THR	FPS: Osteotomies at the hip	FPS: Meniscus repair	FPS: THR/TKR complications
16.45	Break									
17.00	FPS: Wear in THR	FPS: Neuromuscular scoliosis	FPS: Spine fusion technique	FPS: Shoulder - trauma	FPS: Scoliosis	FPS: Benign bone tumours	FPS: Knee replacement	FPS: Acetabular revision THR	FPS: Anterior/posterior cruciate ligament	FPS: Hip non-trauma: miscellaneous
18.00	Workshops and Satellite Symposiums by the Industry									



E F O R T

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

June 3 - 8, 1999
Brussels

Monday, June 7

Monday, June 7

room 1

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., Misslis 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

Thomson R.L., Lavernia C., Barrack R., Tzoukaglou E. (USA)

Monday, June 7

room 2

08.15 **Instructional Course Lecture**
Bone oedema, focal transient osteoporosis
S. Hofmann (A)

09.15 **Break**

09.30 **Free Paper Session**
Avascular necrosis

- Potential etiologic factors to the development of osteonecrosis of the femoral head
Malizos K., Dailiana Z., Zalavras Ch., Vraggalas V., Vlachogiannopoulos P. (GR)
- Bone marrow edema syndrome (BMES) of the hip in pregnancy: therapeutic concept for a rare disease
Hofmann S., Breitensteiner M., Schneider W., Urban M. (A)
- Vascularized versus nonvascularized fibular grafting for the treatment of osteonecrosis of the femoral head
Plakseychuk A., Kim S., Park B., Rubash H., Sotereanos D. (USA)
- Treatment of femoral head osteonecrosis with the free vascularized fibular graft - a five to nine year follow-up study
Malizos N.K., Korompilias A., Beris A.E., Zalavras Ch.G., Soucacos P.N. (GR)
- Extension of osteonecrosis into the proximal femur as a cause for THA failure in osteonecrosis of the femoral head
Calder J., Pearse M., Revell P. (UK)
- Humeral head osteonecrosis after bone marrow transplantation
Bizot P., Lavelle G., Nizard R., Sedel L. (F)

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.



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., Fabbriani C., Carta G., Brandano A., Falchi M. (I)
- The patellar tendon bone graft is stronger than previously published
Müllner Th., Reihner 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 exstrophy 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

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

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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**08.15** Free Paper Session: Shoulder calcifications

- Extracorporeal shock wave therapy in the treatment of chronically painful calcifying tendinitis of the rotator cuff
Seil R., Rupp S., Enßlin S., Gebhardt T., Kohn D. (D)
- Treatment of tendinosis calcarea and impingement by extracorporeal shock wave therapy (ESWT)
Labek G., Auersperg V., Böhler N. (A)
- Clinical and radiological results after shock wave application to tendinitis calcarea of the shoulder
Maier M., Koehler S., Staupendahl D., Pfahler M., Refior 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., Pennig 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

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 Free Paper Session: Malignant bone tumours

- Long-term outcome of treatment of localised chondrosarcoma of bone
Fiorenza F., Abudu A., Ayoub K., Tillman R.M., Carter S.R. (UK)
- Results of treatment of localised primary Ewing's sarcoma of bone in patients with 5 to 15 years follow-up
Abudu A., Grimer R.J., Carter S.R., Tillman R.M., Spooner D.S. (UK)
- Limb-saving surgery, survival and prognosis in osteogenic sarcoma: the Hungarian experience
Szendroi M. (RO), Papai ZS. (RO), Koos R. (H), Antal I. (RO).
- Use of custom-made spaceholders in bone defects
Peters P., Burgkart R., Günther T., Gradingner R., Plötz W. (D)
- Distal fibulectomy for malignant or aggressive benign tumors
Papagelopoulos P., Galanis E., Frassica F., Sim F., Unni K. (USA)
- Endoprosthetic replacement of the distal tibia for aggressive tumours: a report of five cases with 4 to 10 years follow-up
Abudu A., Carter S.R., Tillman R.M., Grimer R.J. (UK)

09.30 Free Paper Session: Spine - tumours

- Spinal lesions - Diagnostic value of the Harlow Wood biopsy needle
Christodoulou A., Kapetanios G., Zidrou Ch., Givissis P., Pournaras J. (GR)
- Hemostasis of hypervascular spinal tumors with preoperative embolization and/or intraoperative cryocoagulation
Crow W.N., Hadjipavlou A.G., van Sonnenberg E., Chaljub G. (USA)
- 'En bloc' resections of spine bone tumours
Caceres E., Ruiz A., Del Pozo P., Ubierna M.T., Roca J.(E)
- Surgical treatment of spinal metastases
Specchia N., Politano R., Cotta C., Greco F. (I)
- Operating on patients with malignant spinal tumours: is it worthwhile?
Sapkis G.S., Papadakis S.A., Stathakopoulos D.P., Efsthathiou P. (GR)

10.30 Break**08.15 Free Paper Session: Paediatric Orthopaedics: Perthes/epiphyseolysis**

- Long-term results of the treatment of femoral epiphyseolysis
Doman I., Gazso I., De Jonge T. (H)
- Comparison of the predictive value of Catterall and Herring classification in patients with Perthes' disease
Meurer A., Humke Th., Rosendahl Th., Heine J. (D)
- The value of ultrasonography for the early diagnosis and follow-up of Perthes' disease
Mahlfeld K., Franke J., Kayser R., Grasshoff H. (D)
- The lateral pillar classification for prognosis of Perthes' disease
Stefanovska I., Zafiroski D., Bozinovski Z., Kalicanin M. (MAC)
- Ultrasonography in the diagnosis of transient synovitis of the hip and Legg-Perthes disease
Eggl H., Drekonja T., Kaiser B., Dorn U. (A)
- Open reduction of slipped capital femoral epiphysis - a long-term review at 46 years
Vince A., Todd R.C., Dunn D.M. (UK)

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

- Changes in geometrical parameters of the hip joint from birth to adolescent age
Than P., Sillinger T., Kustos T., Kranicz J., Bellyei A. (H)
- Limited abduction of the hip and DDH
Jari S., Paton R.W., Srinivasan M.S. (UK)
- Ultrasound examination of the child's hip with anterior approach in the human position
Boskoski T., Kareski P., Gavrilovski P. (MAC)
- Preliminary results of the evaluation of a universal sonographic DDH-screening in Germany
Guenther K.P., Stoll S., Schmitz A., v. Kries R., Altenhofen L. (D)
- Improving the management and detection of developmental dysplasia of the hip in the South West of England
Sharpe I., Parsons S.W., Fern E.D. (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.



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.
Katholiek 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
Pitto 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 arthroplasty
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 Abbeele 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.I.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
Nicoloff M., Dittmer, El Sigai-Teer (D)
- Magnetic resonance imaging in the assessment of revascularization following dorso-lateral wedge osteotomy for Kienböck's disease
Lamas Gomez C., Mir Bullo X., Martinez Poyato I., Llusà Pérez 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


15.45 Free Paper Session
Cementless THR

- 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)

16.45 Break

15.45 Free Paper Session
Osteotomies at the hip

- 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)

16.45 Break


15.45 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)

16.45 Break**15.45** Free Paper Session
THR/TKR complications

- Fat and bone marrow embolism during total hip arthroplasty with uncemented and cemented stems
Pitto 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., Koorevaar R.Th., Schreurs B.W., van Kampen A., Lemmens A. (NL)
- The operative therapy of periarticular heterotopic ossifications of the hip following brain and spinal cord injury
Frank E., Mayr G., Ritschl P., Salzer M. (A)

16.45 Break

17.00 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)

17.00 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
Polard J.-L., Husson J.-L., Le Huec J.C., Trebuchet G., Bossis J.M. (F)

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
Macheras G.A., Tsiamsouris K., Vlassis K., Kostakos A., Loupas D. (GR)
- 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)



17.00 Free Paper Session
Scoliosis

- **Consequences of neurogenic mixed evoked potentials disturbance on the surgical strategy during scoliosis surgery**
Passuti N., Péréon 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)**
Pratt R.K., Cole A.A., Webb J.K., Burwell R.G. (UK)

17.00 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**
van den Brand I.C.J.B., Niesten J.A., Tulp N.J.A., Rijnberg W.J., Muller J.C. (NL)
- **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**
Somers J.F.A., Timperley A.J., Wendover N., Gie G., Ling R.S.M. (B & UK)
- **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**
Schreurs B.W., van Tienen T.G., Gardeniers J.W.M., Verdonschot N., Slooff T.J.J.H. (NL)
- **Block allografts in revision total hip replacement**
Somers J.F.A., Gie G., Timperley A.J., Norton M., Ling R.S.M. (B & UK)
- **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 quadrupled 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
van Stralen G.M.J., Wymenga A.B., Anderson P.G., Nuyten R.A. (NL)
- 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., Tschauer C., Urban M., Czerny (A)





June 3 - 8, 1999
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E F O R T

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

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

	room 1	room 2	room 3	room 4	room 5	room 6	room 7	room 8	room 9	room 10
08.15	ICL: New trends in long bone fracture fixation in the lower extremity C. Krettek (D)	ICL: The Norwegian implant register L.I. Havelin (N)	ICL: Contemporary treatment of unicompartmental arthrosis of the knee A. Lindstrand (S)	ICL: HIV: the occupational hazards R. Lemaire (B)	ICL: Biology of cartilage repair L. Hangody (H)	ICL: Resistance of orthopaedic implants to infection J. Cordero (E)	ICL: Soft tissue coverage in orthopaedic surgery P. Wylock (B)			
09.15	Break									
09.30	FPS: Tibial diaphysis fractures	FPS: THR: miscellaneous	FPS: Unicompartmental knee replacement	FPS: Metatarsalgia	FPS: Cartilage defects	FPS: THR specific indications	FPS: Femur diaphysis fractures	FPS: Paediatric Orthopaedics: developmental dysplasia of the hip	FPS: Spine - infection	FPS: Knee - fractures
10.45	Break									
11.00	Award Ceremony									
12.00	Lunch - Workshops and Satellite Symposiums by the Industry									
14.00	SS: Principles of fixation of long bone fractures	SS: Bone reconstruction in revision THR	SS: Rotator cuff surgery	SS: Lumbar spinal stenosis	SS: Shoulder prostheses	SS: The science of ACL reconstruction	FPS: Femoral neck fractures	FPS: Blood saving	FPS: Talus/Calcaneus	FPS: Cervical spine
15.30	Break									
15.45	FPS: Tibial diaphysis fractures	FPS: Impaction bone grafting in revision THR	FPS: Rotator cuff tears	FPS: Low back pain	FPS: Shoulder prosthesis	FPS: Anterior cruciate ligament	FPS: Femoral neck fractures	FPS: Blood saving in TKR	FPS: Sports medicine	FPS: Kyphosis
16.45	Break									
17.00	FPS: Nonunion of diaphyseal fractures of the tibia	FPS: Revision THR (Acetabulum)	FPS: Revision THR (femur)	FPS: Low back pain	FPS: Elbow prosthesis/arthrolysis	FPS: Fracture treatment	FPS: Anterior/posterior cruciate ligament	FPS: Cementless TKR	FPS: TKR specific indications	FPS: Spondylolysis
18.00										





E F O R T

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

June 3 - 8, 1999
Brussels

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., Beksac 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
Toivanen J.A.K., Hirvonen M., Auvinen O., Järvinen T.N., Järvinen M.J. (SF)

10.45 Break**11.00 Awards Ceremony****12.00 Lunch Break**

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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
Chattoo 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 Ch., 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

Tuesday, June 8

room 3

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
Weale A., Newman J.H., Ackroyd C.E., Murray D.W. (UK)
- Clinical experience in revision of unicondular 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
Weale A., Newman J.H., Ackroyd C.E., Murray D.W. (UK)

10.45 Break

Tuesday, June 8

room 4

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., Ivanic G., Easley M., Meyerson M. (USA)
- Regnaud 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
Roth A., Fuhrmann R., Notni A., Tümpel A., Venbrocks R.A. (D)
- 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

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Tuesday, June 8

room 5

08.15 Instructional Course Lecture
Biology of cartilage repair
L. Hangody (H)

09.15 Break

09.30 Free Paper Session
Cartilage defects

- 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

Tuesday, June 8

room 6

08.15 Instructional Course Lecture
Resistance of orthopaedic implants to infection
J. Cordero (E)

09.15 Break

09.30 Free Paper Session
THR specific indications

- 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

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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., Wronski 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., Pirotopoulos 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., Bal E., Öncag H., Alpaydin S. (TR)

10.45 **Break**

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09.30 **Free Paper Session**
Paediatric Orthopaedics:
Developmental dysplasia of the hip

- Failed closed reduction in developmental dysplasia of the hip
Ruiz A., Cosgrave A.P., Lappin K.J., Wray A.R. (UK)
- Short-term evaluation of open reduction of the hip in DDH
Lappin K.J., Ruiz A.L., Cosgrove A.P., Wray A.R. (UK)
- 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)

10.45 **Break**



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
Hadjipavlou A.G., Mader J.T., Muffoletto A., Nauta H.J.W. (USA)
- Percutaneous transpedicular management of lumbar spondylodiscitis
Crow W.N., Hadjipavlou A.G., Nauta H.J.W., Jensen R.E. (USA)
- 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 unicondylar 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

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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**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

Tuesday, June 8

room 3

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)

15.30 Break

Tuesday, June 8

room 4

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



14.00 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)

15.30 Break

14.00 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)

15.30 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., Pliotopoulos A., Deimantes G., Lochovitis K., Antoniou N. (GR)
- Short and long-term results of internal fixation with screws of fresh femoral neck fractures
Efstathiopoulos 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
Blood saving

- An open-label, randomized, parallel-group study to compare the efficacy and safety of perioperative procrit (epoetin alfa) and autologous predeposit to reduce the risk of transfusion in subjects undergoing major elective orthopedic surgery
Stowell C., Chandler H.P., Frei D., Jove M. (USA)
- Hemapheresis in the operating room boosts autologous transfusion for major reconstructive spine surgery and total hip arthroplasty
Shulmann G., Hadjipavlou A.G., Grecula M. (USA)
- The role of trasylol in primary THR
Langdown A., Field J. (UK)
- Tranexamic acid reduces postoperative blood losses associated with elective total hip replacement
Duquenne P., Lhoest L., Henkes W., de Sart F. (B)
- Reduction of blood loss by tranexemic acid in total knee replacement
Sorin A., Claeys M.A., Jansen A., D'Haese J., Camu F. (B)

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

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
Pekkarinen J., Alho A., Lepistö J., Ylikoski M., Tallroth K. (SF)
- 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
Kamineneni 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
Wallace W.A., Riddell A.M., Manning P.A., Reese J.M., Neumann L. (UK)
- 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., Neviaser 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., Kapetanios G., Dimitriou C., Papadimitriou N., Pournaras J. (GR)

16.45 Break


Tuesday, June 8

room 5

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

Tuesday, June 8

room 6

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?
Korkala O.L., Niskanen R.O., Kuokkanen H.O.M., Haapala J.K., Kaukonen J.P. (SF)
- 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


Tuesday, June 8

room 9

15.45 Free Paper Session
Sports medicine

- Arthropathy after high-performance karate - analysis of the training methods for a specific prevention
Lauer K., Schlotterbeck A., Jakhel R., Schaff P., Imhoff A. (D)
- Recurrent effort-related compartment syndrome of the forearm in motocross racers
Claes T., Verfaillie 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

Tuesday, June 8

room 10

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., Azoulay 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 extracorporeal 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., Heine 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 Kerboul acetabular device**
Hamadouche M., Kerboul L., Courpied J.P., Kerboul 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)



17.00 Free Paper Session
Revision THR (femur)

- 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)

17.00 Free Paper Session
Low back pain

- 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
Petrrou 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 controlled 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., Heikkilä J., Magyar G., Giannini S. (I, SF & S)



17.00

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., Götde 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)

17.00

Free Paper Session

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

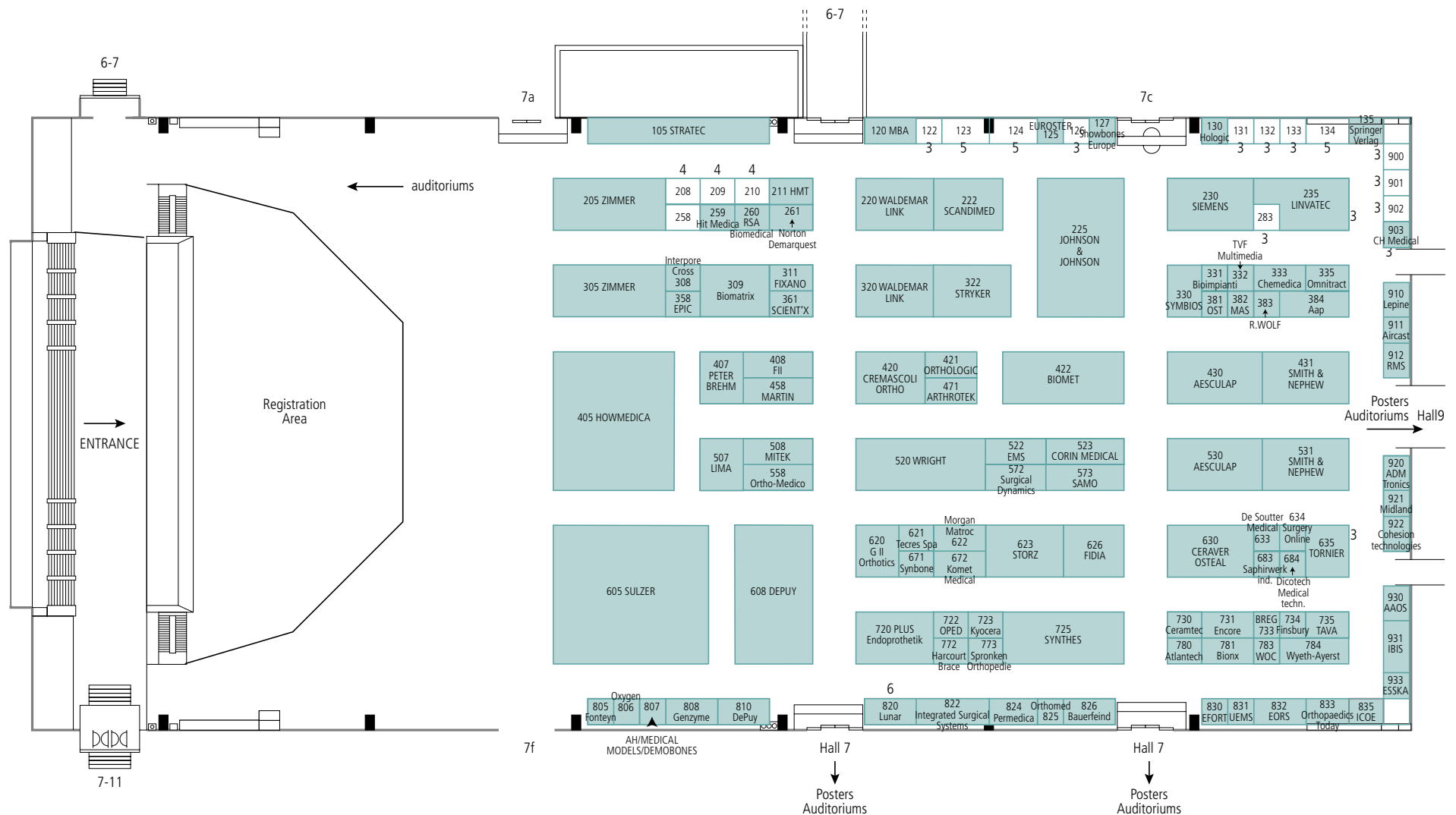
- **Total knee replacement for hemophilic arthropathy: A study of 26 cases**
Gougeon F., Strouk G., Besson A., Marey A., Duquennoy A. (F)
- **Rotating hinged, hydroxyapatite coated versus fixed hinged, uncoated**
distal femoral replacements - A study of 402 cases
Unwin P., Blunn G., Cannon S., Grimer 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., Michielsens 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)



Exhibition Floor Plan





E F O R T

June 3 - 8, 1999
Brussels

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 Symposia 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

Company	Stand	Company	Stand	Company	Stand
aap Implantate AG	385	Genzyme	808	OST Developpement	381
ADM Tronics	920	GII Orthotics	620	Permedica	824
Aesculap	430	HMT - High Medical Technologies	211	Peter Brehm GmbH	407
AH Medical Models Demobones	807	Harcourt Brace	772	PLUS Endoprothetik	720
Aircast	911	HIT Medica	259	R. Wolf Endoscopie	383
Arthrotek	471	Hologic Europe S.A.	130	RMS	912
Atlantech Medical Devices	780	Howmedica	405	RSA Biomedical Innovations	260
Bauerfeind	826	Integrated Surgical Systems bv	822	Samo	573
Breg	733	International Center		Saphirwerk	683
Bioimpianti Gruppo Industriale	331	for Orthopaedic Education	835	Sawbones Europe AB	127
Biomatrix	309	Interpore	308	ScandiMed	222
Biomet Ltd	422	Johnson & Johnson Orthopaedics	225	Scient' X	361
Bionx Implants Ltd.	781	Journal of Bone and Joint Surgery	931	Siemens Medical Engineering	230
C.H. Medical	903	Karl Storz Endoscopy	623	Slack Inc. - Orthopaedics Today	833
CeramTec AG	730	Komet Medical - Brasseler	672	Smith & Nephew	431
Ceraver Osteal	630	Kyocera Corporation	723	Springer Verlag GmbH & Co	135
Chemedica	333	Lepine	910	Spronken Orthopedie	773
Cohesion Technologies	922	Lima-Lto spa	557	Stratec Medical	105
Corin Medical Ltd.	523	Linvatec	235	Stryker	322
Cremascoli Ortho	420	Lunar Europe	820	Sulzer Medica	605
DePuy	608	M.A.S.	382	Surgery Online	634
De Soutter Medical	633	Martin Medizin-Technik	458	Surgical Dynamics	572
Discotech Medical Technologie	684	Mathys Medical		Symbios	330
EMS Electro Medical Systems	522	MBA	120	Synbone AG	671
Encore Orthopaedics Inc	731	Midland Medical Technologies Ltd	921	Synthes NV	725
EPIC	358	Mitek	508	Tava Surgical Instruments	735
Euroster	125	Morgan Matroc Ltd	622	Tecres S.P.A	621
Exogen Inc.	806	Norton Demarquest	261	Tornier	635
F.I.I.	408	Omni-Tract Surgical	335	TVF Multimedia	332
FIDIA	626	OPED	722	Waldemar Link	220
Finsbury Ltd.	734	Orthologic Canada	421	Wright Medical Technology	520
Fixano	311	Orthomed	825	Wyeth-Ayerst Global Pharmaceuticals	785
Fonteyn Medical Books	805	Ortho-Medico	558	Zimmer	205





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 Cinquanteaire

Rate Until 30/04/99 3,250 BEF

At the venue 3,500 BEF (if seats are still available)

All recent information on the EFORT Congress as well as registration forms can be found on the INTERNET at:
<http://www.medicongress.com> or <http://www.efort.org> or <http://www.belgianorthoweb.be/efort>



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

	until 30/04/99	at the venue
Consultants	17,000	19,000
Residents*, Students*, Allied Health*	6,000	8,000

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 CONGRESS VENUE

see map page 119

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	Belgiëplein - 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:
<http://www.medicongress.com> or <http://www.efort.org> or <http://www.belgianorthoweb.be/efort>



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](http://www.ib.be/hotexpo/) at <http://www.ib.be/hotexpo/>



HOTELS AND RATES (in BEF)

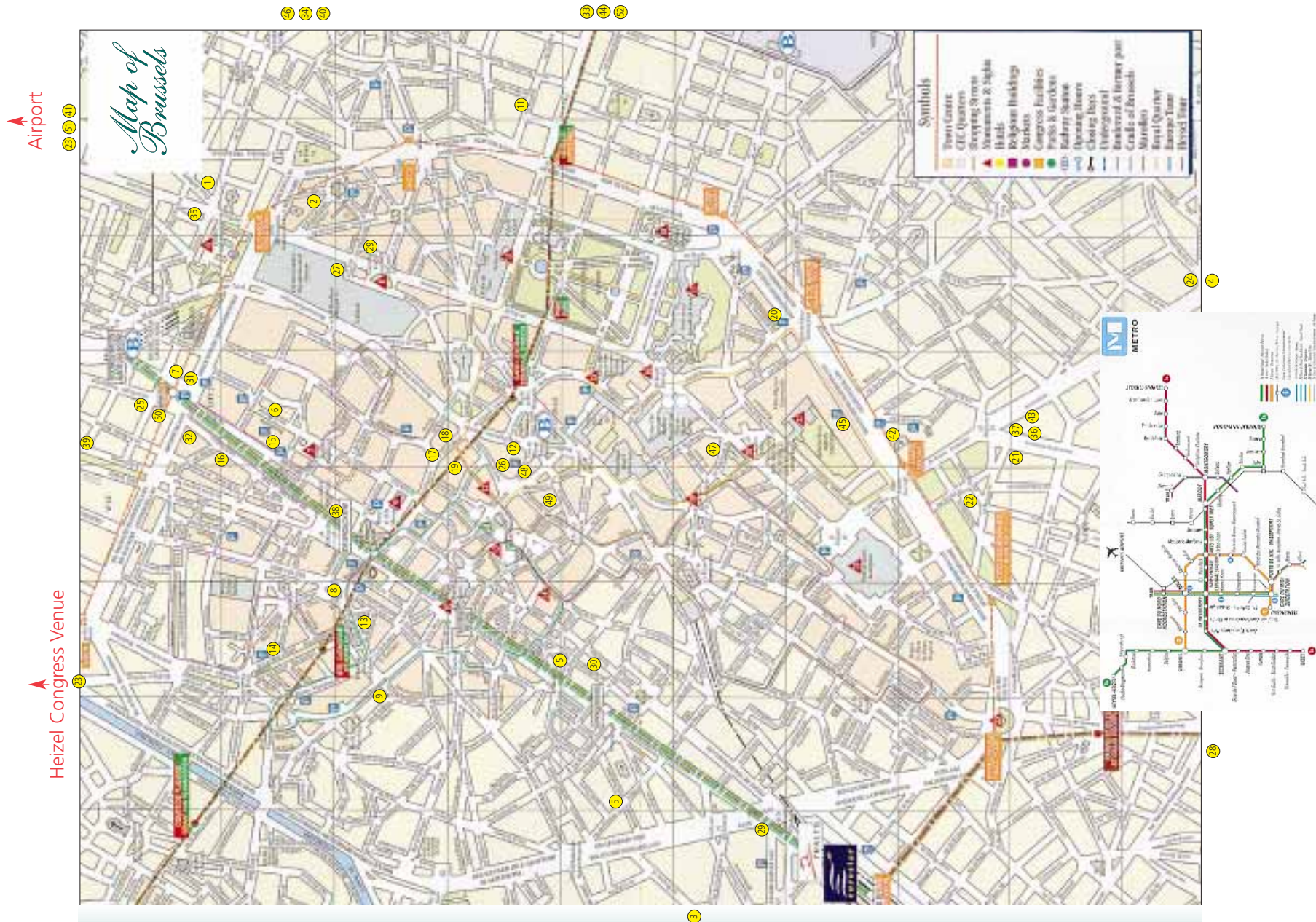
	Map	Single	Double
1 Star category and student rooms			
Centre Vincent Van Gogh	①	700	1300
Jacques Brel	②	800	1330
Génération Europe	③	800	1330
Lloyd George	④	1900	2100
Mirabeau	⑤	2000	2650
Sleep Well	⑥	820	1370
2 Stars category			
Albert 1er.	⑦	3750	4250
Astrid	⑧	4000	4500
Atlas	⑨	4100	4700
Balladins	⑩	3500	3500
City Garden	⑪	4000	4500
Ibis Centre (+)	⑫	5250	5250
Ibis Ste-Catherine	⑬	4700	4950
Orion	⑭	3300	3600
Président Nord	⑮	4200	4700
Vendôme	⑯	3700	4200
3 Stars category			
Arctia	⑰	5000	6000
Arenberg (+)	⑱	4900	5700
Aris	⑲	4500	5500
Chambord	⑳	3850	4450
Delta	㉑	4600	5300
Diplomat	㉒	4600	5300
Holiday Inn Garden Court	㉓	4150	4350
Four Points (+)	㉔	5500	6200
New Siru	㉕	4200	4500
Novotel (+)	㉖	6800	7300
Président Centre	㉗	5200	5700
Ustel	㉘	4000	4600

	Map	Single	Double
4 Stars category			
Astoria (+)	㉙	7200	7200
Bedford	㉚	5200	6000
Crown Plaza (+)	㉛	4900	5700
Dome	㉜	4100	4600
Dorint	㉝	6500	6500
Eurovillage	㉞	6100	7700
Grand Hotel Mercure	㉟	5650	5650
Holiday Inn Brussels	㊱	7200	7200
Manos (+)	㊲	5000	5500
Metropole (+)	㊳	7500	9000
Président WTC (+)	㊴	4900	5500
Sodehotel	㊵	5700	6200
Sofitel Airport	㊶	7000	7000
Sofitel Toison d'or	㊷	7000	7000
5 Stars category			
Conrad (+)	㊸	8000	8000
Europa Intercontinental	㊹	7500	7500
Hilton	㊺	8200	8700
Hilton Résidence	㊻	8900	10000
Jolly Hotel Sablon	㊼	7500	8500
Meridien	㊽	8900	8900
Royal Windsor (+)	㊾	6900	7900
Sheraton	㊿	8000	9000
Sheraton Airport	①	8500	8500
Swissotel	②	6900	7500

Rate per night (breakfast, tax and service included)
(+) More luxurious in the same category

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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.



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

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✉ +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:
<http://www.medicongress.com> or <http://www.efort.org> or <http://www.belgianorthoweb.be/efort>



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

until 30/04/99	2,000 BEF
at the venue	2,500 BEF

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 GAASBEEK – 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 Belgium'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.

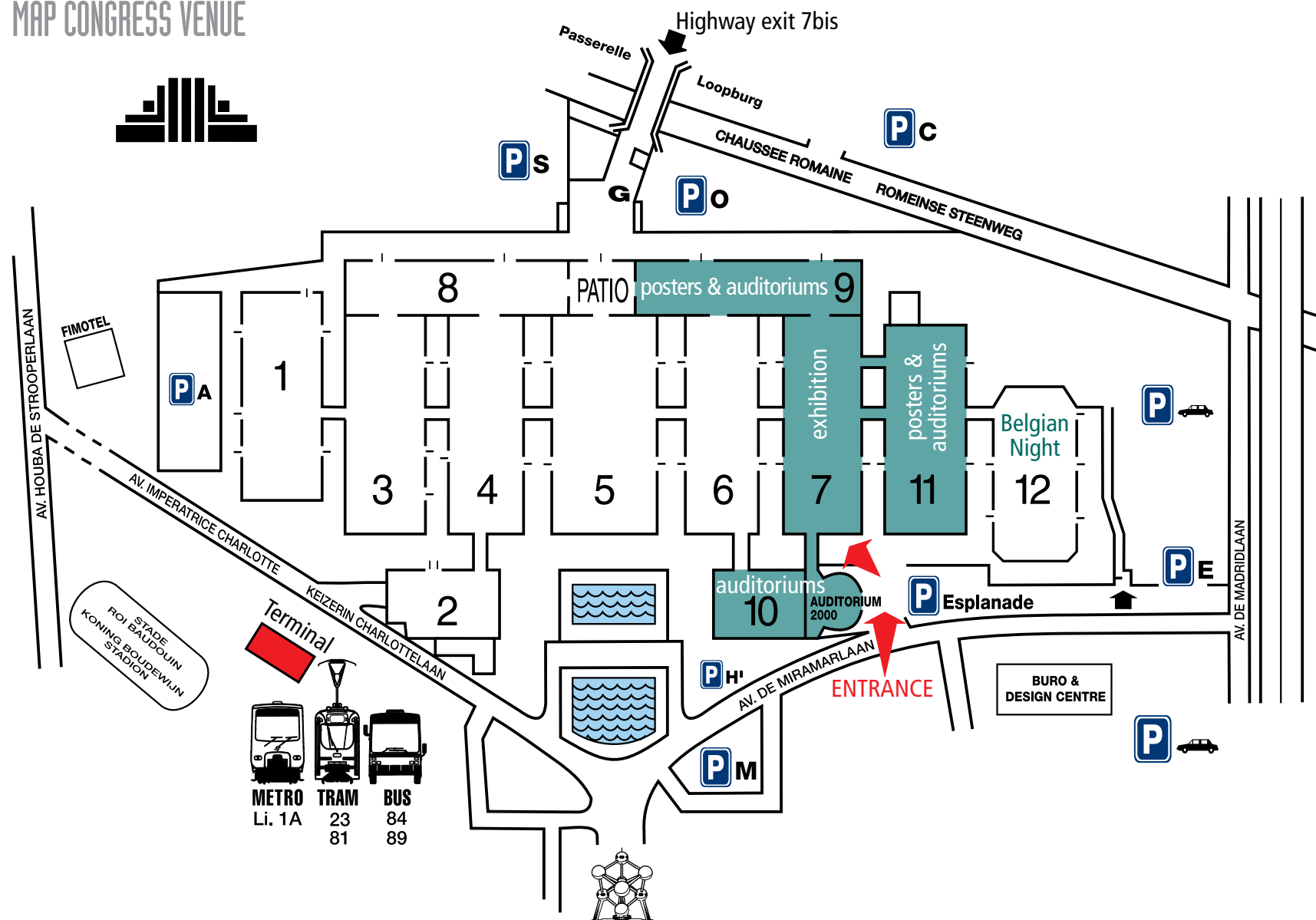
Cancellations Cancellations are accepted until April 30, 1999. The full amount will be refunded less 1,000 BEF covering administration costs. No refunds are made for cancellations received after this date. Cancellations are to be confirmed in writing.

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



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