

Tuesday, October 2, 2007

15:00 - 2000 Registration
Poster Mounting

Wednesday, October 3, 2007

0830-0850 **WELCOME ADDRESS**
Local Host: E. Munting, Brussels

0850 Thoracolumbar I: Stenosis / Disc
Chair: [HM. Mayer](#), [P. Barsa](#)

- 08:50 **1** SURGERY VERSUS PROLONGED CONSERVATIVE TREATMENT FOR SCIATICA.
WC Peul, R Brand, RTWM Thomeer, BW Koes
Leiden University Medical Center and Medical Center Haaglanden, the Hague, the Netherlands
- 09:00 **2** VALUE OF AXIAL LOADING MAGNETIC RESONANCE IMAGING AND COMPUTERIZED TOMOGRAPHY-MYELOGRAPHY IN DECISION MAKING IN THE TREATMENT OF DEGENERATIVE LUMBAR SPINAL STENOSIS
M Sirvanci, KA Ganiyusufoglu, M Bhatia, C Ozturk, S Karaca, A Hamzaoglu
Istanbul Spine Center, Florence Nightingale Hospital, Istanbul, Turkey
- 09:10 **3** MOTION AT THE FUNCTIONAL SPINAL UNIT WITH HEALTHY AND DEGENERATED DISCS: A DYNAMIC MRI STUDY OF LUMBAR SPINE
A Alanay, M Chen, C Chen, S Lee, J Wu, S Leith, J Wang
UCLA School of Medicine Comprehensive Spine Center, USA
- 09:20 **4** HISTOLOGICAL CHANGES IN THE LUMBAR DISC AFTER DYNAMIC NEUTRALIZATION
N Specchia, M Martiniani, M De Benedetto
Department of Orthopaedics University of Ancona, Italy
- 09:30 **5** A PROSPECTIVE RANDOMISED STUDY ON THE LONG-TERM EFFECT OF LUMBAR FUSION ON ADJACENT DISC DEGENERATION
P Ekman, H Möller, R Hedlund
Karolinska Institutet, Dep. of Clinical Science, Intervention and Technology (CLINTEC), Division of Orthopedics, Karolinska University Hospital Huddinge, Sweden
- 09:40 **6** A DOUBLE BLIND RANDOMISED TRIAL OF PERI-RADICULAR INJECTIONS OF CORTICOSTEROID IN SCIATICA AND STENOSIS
P Sell, S Tafazal, N Chaudary, L Ng
Department of Orthopaedics Surgery, University Hospitals of Leicester, Leicester, United Kingdom
- 09:50 **7** SPINAL EPIDURAL HEMATOMA AFTER SPINAL DECOMPRESSION SURGERY
H Aono, T Ohwada, M Iwasaki, K Ariga, T Fuji
Osaka National Hospital, Japan

10:00-10:30 **BREAK**

1030 Cervical Spine I
Chair: [D. Grob](#), [P. Suchomel](#)

- 10:30 **8** OPERATION OF LATERAL CERVICAL DISC HERNIATIONS IN FULL-ENDOSCOPIC DORSAL TECHNIQUE COMPARED TO CONVENTIONAL VENTRAL DECOMPRESSION AND FUSION
S Ruetten, M Komp, H Merk, G Godolias
Department of Spine Surgery and Pain Therapy, Center for Orthopaedics and Traumatology, St. Anna-Hospital Herne, Herne, Germany
- 10:40 **9** CERVICAL ANTERIOR PLATES FOR 2-LEVEL ANTERIOR DECOMPRESSION AND FUSION
A Yamazaki, K Watanabe, K Sawakami, T Izumi
Department of Orthopaedic Surgery, Spine Center, Niigata Central Hospital, Japan
- 10:50 **10** CORRELATION OF IN VIVO- AND SIMULATOR-RETRIEVED METAL-ON-METAL CERVICAL DISC REPLACEMENTS
S Kurtz, M Powell, L Ciccirelli, R Slskey, S White, F Chan
Exponent Inc., Philadelphia, PA, and Medtronic, Memphis, TN, USA
- 11:00 **11** CERVICAL DISC ARTHROPLASTY WITH PRODISC®-C: CLINICAL IDE TRIAL RESULTS FROM 5 CENTERS WITH 2-3 YEAR FOLLOW-UP
J Goldstein, J Chapman, J Yue, G Anderson, R Balderston, S Rushton, J Spivak, J Bendo
New York University - Hospital for Joint Diseases, New York, NY; Pennsylvania Hospital, Philadelphia, PA; Yale Medical Center, New Haven, CT; Rothman Institute, Philadelphia, PA; Harborview Medical Center, Seattle, WA, USA
- 11:10 **12** RANGE OF MOTION AND RADIOLOGICAL CHANGES FOLLOWING TCDR WITH THE PRODISC C
C Mehren, F Grochulla, B Noens, P Suchomel, A Korge, HM Mayer
Spine Center Munich, Orthozentrum, Munich, Germany; Neurosurgery Gent, AZ Sint-Lucas, Ghent, Belgium; Dpt. of Neurosurgery, Neurocenter, Regional Hospital, Liberec, Czech Republic
- 11:20 **13** IN VIVO DEFORMATION AND WEAR OF RETRIEVED BRYAN CERVICAL DISC ARTHROPLASTIES
S Kurtz, J Heller, J Goffin, L Ciccirelli, M Powell, J Rouleau, F Chan, S White
*Exponent Inc., Philadelphia, PA, USA, Emory University, Atlanta, GA, USA, University Hospital, Leuven, Belgium**cr**cr*Medtronic, Memphis, TN, USA*

- 11:30 **14** MINIMUM TWO-YEAR OUTCOME OF CERVICAL LAMINOPLASTY WITH DEEP EXTENSOR MUSCLE PRESERVING APPROACH: IMPACT ON CERVICAL SPINE FUNCTION AND QUALITY OF LIFE
Y Kotani, K Abumi, M Ito, Masahiko Takahata, Hideki Sudo, Shigeaki Ohshima, Akio Minami
Dept. of Orthopaedic Surgery, Hokkaido University Graduate School of Medicine, Japan
- 11:40 **15** DO POSTOPERATIVE NECK AXIAL SYMPTOMS AND LOSS OF MOTION AFFECT QUALITY OF LIFE IN CERVICAL LAMINOPLASTY?
T Numasawa, T Yokoyama, A Ono, K Wada, Kazunari Takeuchi, Satoshi Toh
Department of Orthopaedic Surgery, Hirosaki University School of Medicine, Japan
- 11:50 **16** PLASMA DISC DECOMPRESSION COMPARED TO CONSERVATIVE CARE FOR TREATMENT OF CONTAINED CERVICAL DISC PROTRUSION: ONE YEAR RESULTS FROM A RANDOMIZED CLINICAL TRIAL
A Cesaroni, P Nardi
Policlinico Casilino Hospital Rome, Italy

12:00-14:00 LUNCH-/WORKSHOPS

EUROSPINE WORKSHOP: Registry and Quality Management

Chair: M Aebi, HM Mayer

- 12:15 INTRODUCTION
HM Mayer, Munich, Germany
- 12:20 HEALTH TECHNOLOGY ASSESSMENT IN SPINAL SURGERY
N Boos, Zürich, Switzerland
- 12:35 EXPERIENCES FROM THE SWEDISH SPINE REGISTRY
P Fritzell, Falun, Sweden
- 12:45 STATUS QUO AND FIRST RESULTS FROM THE INTERNATIONAL SPINE REGISTRY "SPINETANGO"
M Melloh, Bern, Switzerland
- 12:55 SWISS SPINE REGISTRY: THE CASE OF GOVERNMENTALLY MANDATED SPINE REGISTRY
P Moulin/C Röder, Bern, Switzerland
- 13:05 QUESTIONS AND ANSWERS
whole faculty
Room 1123

14:00 Motion Preservation Techniques

Chair: R. Mulholland, J.C. LeHuec

- 14:00 **17** PROSPECTIVE RANDOMIZED SERIES COMPARING MAVERICK LUMBAR TOTAL DISC REPLACEMENT (T.D.R.) WITH ANTERIOR LUMBAR INTERBODY FUSION (A.L.I.F.)
K Pettine, J Donner
Rocky Mountain Spine Arthroplasty Specialists, Loveland, USA
- 14:10 **18** TWO-LEVEL PRODISC-L PATIENTS FROM 6 CENTERS WITH GREATER THAN 2 YEAR FOLLOW-UP
J Goldstein, R Balderston, J Spivak, R Linovitz, J Zucherman, F Cammisa, H Herkowitz
NYU - Hospital for Joint Diseases; Pennsylvania Hospital; CORE Orthopaedic Medical Center; St Mary's Spine Center; Hospital for Special Surgery; William Beaumont Hospital, New York, USA
- 14:20 **19** METAL-ON-METAL LUMBAR DISC ARTHROPLASTY - TWO-YEAR MINIMUM FOLLOW-UP
GS Miz, R Sasso, C Theofilos, M Hahn
Bone & Joint Physicians, Oak Lawn, IL, USA
- 14:30 **20** POLYETHYLENE WEAR AND PERIPROSTHETIC INFLAMMATION IN TOTAL DISC ARTHROPLASTY
A van Ooij, TP de Bruin, J Cleutjens, SM Kurtz, I Punt, LW van Rhijn
Departments of Orthopaedic Surgery and of Pathology University Hospital Maastricht the Netherlands; Department of Bioengineering Drexel University Philadelphia USA
- 14:40 **21** RESULTS OF SALVAGE OPERATIONS FOR FAILED ARTIFICIAL DISCS. DOES IMPLANT REMOVAL IMPROVE THE OUTCOME OF REVISION TOTAL DISC REPLACEMENT SURGERY?
IM Punt, VM Visser, JHA Antonis, LW van Rhijn, SM Kurtz, GWH Schurink, A van Ooij
1. Department of Orthopaedic Surgery, University Hospital Maastricht, Maastricht, the Netherlands; 2. Drexel University and Exponent, Inc., 3401 Market Street, Suite 300, Philadelphia. PA 19104, USA; 3. Department of Vascular Surgery, University Hospital Maastricht, Maastricht, The Netherlands
- 14:50 **22** INDIRECT DECOMPRESSION (X-STOP) VERSUS CONVENTIONAL DECOMPRESSIVE SURGERY FOR LUMBAR SPINAL CLAUDICATION - A PROSPECTIVE RANDOMIZED TRIAL
B Strömqvist, S Berg, P Gerdhem, R Johnsson, T Sahlstrand, Tycho Tullberg
Lund and Malmö University, Stockholm Spine Center, Dept of Orthopedics, Sweden
- 15:00 **23** BIOMECHANICAL BEHAVIOR OF DIFFERENT INTERSPINOUS IMPLANTS BEFORE AND AFTER DYNAMIC LOADING
H-J Wilke, J Drumm, K Häussler, C Mack, L Claes, A Kettler
Department of Orthopaedic Research and Biomechanics, Ulm, Germany
- 15:10 **24** NOTOCHORDAL CELLS: NUTRITIONAL DEMANDS IN THE CONTEXT OF TISSUE ENGINEERING
T Guehring, GW Omlor, M Sumner, G Wilde, JP Urban
*Berufsgenossenschaftliche Unfallklinik Ludwigshafen, Ludwig-Guttman-Str. 13, 67071 Ludwigshafen, Germany; *Orthopädische Universitätsklinik Heidelberg, Schlierbacher Landstr. 200a, 69118 Heidelberg, Germany; University of Oxford, Department of Physiology, Anatomy and Genetics, South Parks Road, Oxford OX1 3PR, UK*
- 15:20 **25** EURODISC STUDY - ASSESSMENT OF EFFICACY AND SAFETY OF SEQUESTRECTOMY PLUS AUTOLOGOUS DISC CHONDROCYTES Ñ SECOND INTERIMS ANALYSIS
HJ Meisel, R Bertagnoli, M Mayer, A Reinhardt, F Weber, J Herdmann, J Libera, O Josimovic-Alasevic
Neurochirurgie - BG-Kliniken Bergmannstrost Halle (Germany); Orthopädie - St. Elisabeth-Klinikum Straubing (Germany); Orthozentrum München (Germany); Orthopädie - Oberlinhaus Potsdam (Germany); Neurochirurgie - Klinikum Saarbrücken (Germany); Neurochirurgie - Heinrich-Heine-Universität Düsseldorf (Germany); Co.don AG Teltow (Germany)

15:30 **26** SUTURING AND GLUEING DOES NOT SEEM TO BE EFFECTIVE IN THE LONGTERM TO CLOSE ANNULUS DEFECTS AFTER IMPLANTING AN TISSUE ENGINEERED NUCLEUS REPLACEMENT
H-J Wilke, F Heuer, S Erlenmaier, C Neidlinger-Wilke, L Claes
Department of Orthopaedic Research and Biomechanics, University of Ulm, Germany

15:40-16:10 **BREAK**

16:10 Thoracolumbar II: Outcome
Chair: *F. Balagué, F. Christensen*

16:10 **27** CHRONIC BACK PAIN IN PATIENTS WITH RHEUMATOID ARTHRITIS AND IN CONTROL POPULATION: PREVALENCE AND DISABILITY. A 5-YEAR FOLLOW-UP
MH Neva, A Häkkinen, P Isomäki, T Sokka
Departments of Orthopaedic and Trauma Surgery and Medicine, Tampere University Hospital, Tampere, Finland; Departments of Medicine, and Physical Medicine and Rehabilitation, Jyväskylä Central Hospital, Jyväskylä, Finland

16:20 **28** STEP ACTIVITY MONITORING IN LUMBAR STENOSIS PATIENTS UNDERGOING DECOMPRESSIVE SURGERY
TL Schulte, T Schubert, C Winter, D Rosenbaum, M Brandes, V Bullmann, U Liljenqvist, L Hackenberg
University Hospital Münster, Department of Orthopaedics and Motion Analysis Laboratory, Münster, Germany

16:30 **29** GENDER DIFFERENCES IN LUMBAR DISC HERNIATION SURGERY
B Strömqvist, M Ahmad, F Strömqvist, C Hildingsson, B Jönsson
Lund and Umeå University Dept of Orthopedics, Sweden

16:40 **30** LONG-TERM FUNCTIONAL OUTCOME OF INSTRUMENTED POSTEROLATERAL LUMBOSACRAL FUSION IN DEGENERATIVE DISEASES
M Di Silvestre, F Lollì, G Bakaloudis, P Parisini
Spine Surgery Department, Istituto Ortopedico Rizzoli, Bologna (Italy)

16:50 **31** CIRCUMFERENTIAL FUSION IS DOMINANT OVER POSTEROLATERAL FUSION IN A LONG-TERM PERSPECTIVE. COST-UTILITY EVALUATION OF A RANDOMIZED, CONTROLLED TRIAL IN SEVERE, CHRONIC LOW BACK PAIN
R Soegaard, CE Bünger, T Christiansen, FB Christensen
Spine Unit, Orthopaedic Research Lab., University Hospital of Aarhus, Denmark; Health Economics Unit, Institute of Public Health, University of Southern Denmark

17:00 **32** LONG-TERM OUTCOMES EVALUATION AFTER PARS DEFECT REPAIR IN ADULT LOW-GRADE ISTHMIC SPONDYLOLISTHESIS
Th David, S Champain, A Mitulescu, W Skalli
Polyclinique Bois-Bernard, Rouvroy, Franc LBM-ENSAM, Paris, France

17:10 **33** AGE STRATIFIED OUTCOME ANALYSIS OF SURGICAL DECOMPRESSION AND FUSION FOR LUMBAR DEGENERATIVE SPONDYLOLISTHESIS
S Glassman, D Polly, C Shaffrey, C Branch, K Burkus
California Spine Group, Leatherman Spine Institute, University of Virginia Department of Neurosurgery; Department of Neurosurgery Wake Forest University Hughston Clinic, San Diego, USA

17:20 **34** STRATEGIES IN LONG-LASTING LBP - FEAR-REDUCING INFORMATION OR INDIVIDUAL EXERCISES
P Sorensen, T Bendix*, C Manniche*, D Lemvig*, A Indah#*
**The Back Research Center, - part of Clinical Locomotion Science. Funen Hospital, Ringe and University of Southern Denmark. #Specialsykehuset for Rehabilitering, Stavem, Norway*

18:00 **WELCOME RECEPTION**

Thursday, October 4, 2007

08:30 Deformity
Chair: *F. Pellisé, F. Sanchez Perez Grueso*

08:30 **35** EXPERIMENTALLY-INDUCED SCOLIOSIS BY COSTOTRANSVERSECTOMY IN MINIPIGS. TWO MODELS OF SPINAL TENSEGRITY BREAKAGE COMPARING MIDLINE VERSUS POSTEROLATERAL SURGICAL APPROACH
O Riquelme, J Burgos, C Barrios, E Hevia, JL González López, C Correa
Division of Pediatric Orthopedics, Hospital Gregorio Marañón, Madrid; Departments of Pediatric Orthopaedics and Experimental Surgery, Hospital Ramón y Cajal, Madrid; Orthopaedics and Trauma Unit, Dpt. of Surgery, Valencia University Medical School, Valencia; Spine Surgery Unit, Hospital La Fraternidad, Madrid, Spain

08:40 **36** STUDY OF VITAMIN D RECEPTOR GENE POLYMORPHISMS IN FEMALE ADOLESCENT IDIOPATHIC SCOLIOSIS PATIENTS
X Caiwei
Spine Surgery, Drum Tower Hospital, Nanjing University Medical School, Nanjing, China

08:50 **37** A COMPARISON OF THE CONCENTRATION OF MELATONIN (MEL) IN PARAVERTEBRAL MUSCLE AND PLATELETS OF PATIENTS WITH OR WITHOUT ADOLESCENT IDIOPATHIC SCOLIOSIS
RE Acaroglu, I Ake, O Kocak, A Alanay, M Yazici, R Marcucio
Hacettepe University, Ankara, Turkey and University of California San Francisco, CA, USA

09:00 **38** PROSPECTIVE PULMONARY FUNCTION EVALUATION IN ADOLESCENT IDIOPATHIC SCOLIOSIS FOLLOWING OPEN DOUBLETOROCOTOMY FOR ANTERIOR SPINAL FUSION VERSUS POSTERIOR SPINAL FUSION COMBINED WITH RIB HUMP RESECTION
V Bullmann, T Schulte, T Brüning, J Trillsch, UR Liljenqvist
Orthopaedics, University Hospital Muenster; Spine Surgery, St. Franziskus Hospital Muenster, Germany

09:10 **39** NO CHANGES IN THE ASYMMETRIC LOCATION OF THE SPINAL CORD WITHIN THE VERTEBRAL CANAL AFTER CORRECTION OF THORACIC SCOLIOSIS. A CLINICAL AND EXPERIMENTAL STUDY
J Burgos, O Riquelme, C Barrios, G de Blas, E Hevia, I Sampera, G Piza, P Domenech, R Solá, C Correa
Departments of Pediatric Orthopaedics, Electrophysiology and Experimental Surgery, Hospital Ramón y Cajal, Madrid; Orthopaedics and Trauma Unit, Valencia University Medical School, Valencia; Spine Unit, Hospital La Fraternidad, Madrid; Division of Pediatric Orthopaedics, Hospital Son Dureta, Palma de Mallorca; Depatments of Orthopaedic Surgery, Hospital General, Alicante, Spain

- 09:20 **40** INCIDENCE AND RISK FACTORS OF NEUROLOGICAL DEFICITS OF SURGICAL CORRECTION FOR SCOLIOSIS: ANALYSIS OF 1373 CASES AT ONE CHINESE INSTITUTION
Q Yong
Spine Surgery, Drum Tower Hospital, Nanjing University Medical School, Nanjing, China
- 09:30 **41** STIMULUS-TRIGGERED EMG DIFFUSION TEST. A NEW TOOL FOR THE ACCURACY OF THORACIC PEDICLE SCREW PLACEMENT
G de Blas, J Burgos, C Barrios, E Hevia, I Regidor, S García-Urquiza, R Solá, C Correa
Departments of Electrophysiology, Pediatric Orthopaedics and Experimental Surgery, Hospital Ramón y Cajal, Madrid; Orthopaedics and Trauma Unit, Department of Surgery, Valencia University Medical School, Valencia; Spine Unit, Hospital La Fraternidad, Madrid, Spain
- 09:40 **Key Lecture: Degenerative Lumbar Scoliosis**
D Chopin
Spine Center, Insitut Calot, Berck sur Mer, France

10:10-10:40 **BREAK**

10:40 Thoracolumbar III: Fractures / Tumors / Infection
 Chair: *E. Munting, R. Lukas*

- 10:40 **42** 2 YEARS PROSPECTIVE EVALUAUTION OF OSTEOLYTIC LESIONS IN THE THORACIC AND LUMBAR SPINE DUE TO METASTATIC DISEASE AND MULTIPLE MYELOMA
R Pflugmacher, F Kandziora, P Schleicher, KD Schaser, A Schulz, NP Haas, I Melcher
Charité - Universitätsmedizin Berlin, Centrum für Muskuloskeletale Chirurgie, Berlin, Germany
- 10:50 **43** POSTOPERATIVE SPINAL INFECTIONS FOLLOWING POSTERIOR SPINAL FUSION AND INSTRUMENTATION - TREATMENT WITH DEBRIDEMENT AND PRIMARY CLOSURE WITHOUT IMPLANT REMOVAL.
L Kollintzas, N Kouris, M Tiliakos, E Saras, A Kalampokis, P Aggourakis, C Zachariou
Scoliosis & Spine Surgery Unit, iKATI General Hospital, Athens, Greece
- 11:00 **44** THE ROLE OF VERTEBROPLASTY IN THE EFFECTIVE TREATMENT OF SPINAL BURST FRACTURES: A CADAVERIC STUDY ON THE DYNAMIC STABILITY OF PMMA CEMENT IN COMPARISON TO CONVENTIONAL ANTERIOR INSTRUMENTATION.
S Rehman, N Furtado, RK Wilcox, RM Hall
Institute of Medical and Biological Engineering, University of Leeds, UK
- 11:10 **45** AN INTERNATIONAL MULTICENTER RANDOMIZED COMPARISON OF BALLOON KYPHOPLASTY AND NONSURGICAL CARE IN PATIENTS WITH ACUTE VERTEBRAL BODY COMPRESSION FRACTURES
D Wardlaw, S Boonen, L Bastian, J Van Meirhaeghe
Department of Orthopaedics, Woodend Hospital, Eday Road, Aberdeen, Scotland; UZ Gasthuisberg, Herestraat 49, 3000 Leuven, Belgium; Medizinische Hochschule Hannover; Unfallchirurgie, Carl Neuberg Str. 1, 30625 Hannover; Germany; AZ St Jan, Dept Orthopaedics, Ruddershove 10, 8000 Brugge, Belgium
- 11:20 **46** EXPANDABLE CAGES FOR VERTEBRAL BODY REPLACEMENT OF FRACTURES OF THE THORACO-LUMBAR SPINE. CLINICAL AND RADIOLOGICAL OUTCOME AFTER 5-YEARS
KJ Schnake, C Khodadadyan-Klostermann, I Melcher, F Kandziora
Spine Center, CMSC, Charité-Universitätsmedizin Berlin, Germany
- 11:30 **47** CLINICAL OUTCOME OF THORACOLUMBAR SPINAL FRACTURES COMPARING NON-OPERATIVE AND OPERATIVE TREATMENT STRATEGIES BY MEANS OF BLINDED INCLUSION BASED ON CLINICAL EQUIPOISE
A Stadhouder, E Buskens, LWL de Klerk, JA Verhaar, AJ Verbout, FC Oner
University Medical Center Utrecht, the Netherlands
- 11:40 **48** DO PREOPERATIVE STEROID INJECTIONS INCREASE THE RISK OF POSTOPERATIVE INFECTION?
TR Kuklo, MK Rosner, R Moquin
Washington University School of Medicine in St. Louis, USA
- 11:50 **49** INCIDENCE AND MANAGEMENT OF PULMONARY EMBOLISM FOLLOWING SPINAL SURGERY OCCURRING WHILE UNDER CHEMICAL THROMBOPROPHYLAXIS
C Schizas, F Neumayer, V Kosmopoulos
Hôpital Orthopédique de la Suisse Romande, Centre Hospitalier Universitaire Vaudois and University of Lausanne, Switzerland

12:00-14:00 **LUNCH-WORKSHOPS**

12:00 **EUROSPINE WORKSHOP: Idiopathic scoliosis: ventral, dorsal or combined?**

Chair: *F. Dowling, L. Papavero*

12:15 ADVANTAGES OF VENTRAL OVER DORSAL SURGERY
H Halm, Neustadt, Germany

12:45 ADVANTAGES OF DORSAL OVER VENTRAL SURGERY
A Alanay, Ankara, Turkey

13:15 WHEN DO WE NEED BOTH?
R Hedlund, Stockholm, Sweden
 Room 1123

14.00 **FREE AFTERNOON**

Friday, October 5, 2007

- 0830 Thoracolumbar IV: Disc
Chair: C. Greenough, B. Strömqvist
- 08:30 **50** LUMBAR MICRODISCECTOMY: THE TYPE OF APPROACH INFLUENCES THE POSTOPERATIVE ANALGETIC CONSUMPTION
M Brock, Ph Kunkel, L Papavero
Center for Spine Surgery, Eilbek Medical Center; Children Hospital Altona, Hamburg, Germany
- 08:40 **51** TWO-YEAR RESULTS AFTER SURGERY FOR DEGENERATIVE LUMBAR SPINE DISORDERS.
P Fritzell, B Strömqvist, O Hägg, B Jönsson
1Dept of Orthopedics, Falun Hospital, Falun Sweden. 2Dept of Orthopedics, Lund University Hospital, Sweden. 3Dept of Orthopedics, Sahlgrenska University Hospital, Gothenburg, Sweden
- 08:50 **52** A COMPARISON OF AF CELLS, CHONDROCYTES, AND BMDCS: POTENTIAL CANDIDATES FOR INTERVERTEBRAL DISC THERAPY
K Sunguk , Y Tim S. , H William C. , Z Yerun, T Kai-Jow , L Jun
Dept. of Neurosurgery, Yonsei University Medical College, Seoul, Korea; Dept. of Orthopaedics, Emory University School of Medicine, Veterans Affairs Medical Center, Atlanta, Georgia, USA
- 09:00 **53** IVD APOPTOSIS PROMOTES POST-TRAUMATIC DISC DEGENERATION BY DOWNREGULATION OF BCL-2: AN IN-VITRO ANALYSIS OF HUMAN TRAUMATIC VS. DEGENERATED THORACOLUMBAR DISCS
SK Tschoeke, Y Robinson, W Ertel, CE Heyde
Department of Trauma and Reconstructive Surgery, Charité - University Hospitals Berlin, Campus Benjamin Franklin, Hindenburgdamm 30, D-12203 Berlin, Germany, email: sven-kevin.tschoeke@charite
- 09:10 **54** THE EFFECT OF 5-HT_{2A} RECEPTOR ANTAGONIST ON BLOOD FLOW IMPROVEMENT IN LUMBAR DISC HERNIATION AN EXPERIMENTAL STUDY OF APPLICATION OF NUCLEUS PULPOSUS IN A CANINE MODEL
M Sekiguchi, S Konno, S Kikuchi
Department of Orthopaedic Surgery, Fukushima Medical University School of Medicine, Fukushima, Japan
- 09:20 **55** INFLUENCE OF CYTOKINES INHIBITORS ON LEVEL OF MMP-1 AND MMP-3 IN DISC HERNIATION
S Genevay, F Mezin, E Tessitore, P-A Guerne
Department of Rheumatology & Departement of Neurosurgery, University Hospitals of Geneva, Switzerland
- 09:30 **Key Lecture: The Future of Surgery for Low Back Pain**
D Grob
Spinal Unit, Schulthess Clinic, Zürich, Switzerland

10:00-10:30 **BREAK**

- 10:30 **Awards and Honorary Lectures Session**
Chair: C. Greenough, F. Pellisé
- 10:30 EuroSpine Medal Lecture
- 10:40 **Winner of 2007 EuroSpine Award on Clinical Science**
A RANDOMISED CONTROLLED TRIAL OF POST-OPERATIVE REHABILITATION AFTER SURGICAL DECOMPRESSION OF THE LUMBAR SPINE
A Mannion¹, R Denzler¹, J Dvorak¹, M Müntener¹, D Grob²
¹Schulthess Klinik, Zürich, Switzerland; ²Dept of Anatomy, University of Zürich, Switzerland
- 10:50 **Winner of 2007 EuroSpine Award on Basic Science**
A BIOCHEMICAL MECHANISM FOR RESISTANCE OF INTERVERTEBRAL DISCS TO METASTATIC CANCER: FAS LIGAND PRODUCED BY DISC CELLS INDUCES APOPTOTIC CELL DEATH OF CANCER CELLS
JB Park¹ JK Lee² ST Cho¹ EY Park¹ KD Riew³
¹Department of Orthopaedic Surgery, Uijongbu St. Mary's Hospital, The Catholic University of Korea School of Medicine, Korea; ²Department of Laboratory Medicine, Korea Cancer Center Hospital, Institute of Radiological and Medical Science, Seoul, Korea; ³Department of Orthopaedic Surgery, Barnes Jewish Hospital at Washington University, St. Louis, USA
- 11:00 **Winner of 2007 Grammer Award**
- 11:10 **Announcement/Presentation of Poster Prize**
- 11:20 **EuroSpine committee and Task Force Reports**
- 11:30 **EuroSpine Presidential Lecture**
TALKING ABOUT BACK PAIN
CG Greenough
James Cook University Hospital, Marton road, Middlesbrough, UK
- 12:00-14:00 **LUNCH-WORKSHOPS**
- 12:00 **EUROSPINE WORKSHOP ON SAGITTAL BALANCE**
Moderator: C Bünger, Aarhus, Denmark
- 12:15 ARE NORMAL SAGITTAL MORPHOTYPES A PREDICTIVE FACTOR FOR DEGENERATIVE EVOLUTION OF THE SPINE ?
P Roussouly, Lyon, France
- 12:45 SAGITTAL BALANCE IN DEGENERATIVE AND SCOLIOTIC POPULATION
D Chopin, Berk sur Mer, France
- 13:15 THE INFLUENCE OF DISC ARTHROPLASTY AND NON FUSION DEVICES ON SAGITTAL BALANCE
JC Le Huec, Bordeaux, France
Room 1123

Deformities and Growing Spine

Chair: M. Teli, J. Bago

- SP1** INCIDENCE AND EARLY OUTCOME OF ANTENATALLY-DIAGNOSED CONGENITAL VERTEBRAL ANOMALIES
IE Collins, J Budd, BJ Freeman, J Hegarty
 1The Centre for Spinal Studies and Surgery, Queen's Medical Centre, Nottingham University Hospitals NHS Trust, Nottingham, UK; 2 East Midlands & South Yorkshire Congenital Anomalies Register, University of Leicester, Leicester, UK
- SP2** A NEW METHOD TO MEASURE THE ROTATIONAL AND TORSIONAL DEFORMITY IN SCOLIOSIS
T Doi, T Maeda, Y Matsumoto, T Matsumoto, Y Iwamoto
 Department of Orthopaedic Surgery, Graduate School of Medical Sciences Kyushu University
- SP3** PATHOGENESIS OF SCHEUERMANN'S DISEASE: FOCUS ON WEIGHT AND HEIGHT ROLE.
E Fotiadis, E Kenanidis, E Samoladas, A Grigoriadou, G Kapetanos, P Akritopoulos, K Akritopoulou
 1. General Hospital of Veria, Orthopaedic Department, Greece; 2. Aristotle University of Thessaloniki, Medical school, Greece; 3. 3rd Orthopaedic Department of Aristotle University of Thessaloniki, General Hospital Papageorgiou, Greece
- SP4** WILL WE NEED PATIENT SPECIFIC SPINE MODELS?
J Homminga, JR Boeije, GJM Meijer, EEG Hekman, JH van Dieen, AG Veldhuizen, GJ Verkerke
 University of Twente, Vrije Universiteit Amsterdam, University Medical Center Groningen, the Netherlands
- SP5** EFFECTS OF SCHOOL BACKPACK CARRYING ON SAGITTAL AND FRONTAL TRUNK ALIGNMENT IN ADOLESCENTS
P Korovessis, TH Repantis, S Zacharatos, G Petsinis
 Orthopaedic Department, General Hospital Agios Andreas, Patras, Greece
- SP6** LONG-TERM FOLLOW-UP OF FUNCTIONING AFTER SPINAL SURGERY IN PATIENTS WITH RETT SYNDROME
E-L Larsson, S Aaro, H Tropp, H Normelli, B Öberg
 Department of Neuroscience and Locomotion and Department of Health and Society, Linköping, Sweden
- SP7** DECREASED CIRCULATING LEPTIN LEVEL AND ITS ASSOCIATION WITH BODY AND BONE MASS IN GIRLS WITH ADOLESCENT IDIOPATHIC SCOLIOSIS
S Xu, Q Yong
 Spine Surgery, Drum Tower Hospital, Nanjing University Medical School, Nanjing, China

Cervical Spine

Chair: M. Aebi, T. Pigott

- SP8** CADAVER MORPHOMETRIC STUDY OF C1 AND C2: COMPARISON OF THE ANATOMICAL RISK AND BIOMECHANICAL ANALYSIS OF TWO STABILIZATION TECHNIQUES OF THE ATLANTO-AXIAL JOINTS.MYELOPATHY: CLINICAL OUTCOME AND A PROSPECTIVE GAIT ANALYSIS EVALUATION.
F Costa 1, M Pluderi2, M Caroli2, M Lorenzetti2, S Vaga3, F Galöbusera3, SM Gaini2, M Fornari1, M Tschabitscher4
 1 U. O. Neurochirurgia - IRCCS, Istituto Galeazzi - Milano; 2 U.O. Neurochirurgia, Fondazione IRCCS Ospedale Maggiore Policlinico-Mangiagalli, Regina Elena di Milano. Dip. Scienze Neurologiche, Università degli Studi di Milano; 3 Labs - Università Politecnico, Milano; 4 First Anatomic Institute of the University of Vienna
- SP9** BIOMECHANICAL EVALUATION OF VERTEBRAL INTERBODY FORCES UTILIZING DYNAMIC AND FIXED ANTERIOR CERVICAL PLATES WITH CONSTRAINED AND SEMI-CONSTRAINED SCREWS
J Finkenberg, L Grabiak
 Alvarado Orthopedic Medical Group and Biomet Spine, San Diego, USA
- SP10** C5PALSIAFTER C3-7 VERSUS C4-6 LAMINOPLASTY
Y Iizuka, H Iizuka, T Nakajima, S Tsutsumi, Yasunori Sorimachi, Tsuyoshi Ara, Masahiro Nishinome, Kenji Takagishi
 Department of Orthopaedic Surgery, Gunma University Graduate School of Medicine, Japan
- SP11** QUANTITATIVE ANATOMY OF THE END-PLATE OF THE MIDDLE AND LOWER CERVICAL VERTEBRAE IN KOREANS
MK Kim 1, DS Kwak 2, SH Han 2, CK Park 3
 1 Department of Neurosurgery, Kangdong Sacred Heart Hospital, Hallym University. College of Medicine; 2 Department of Anatomy á Catholic Institute for Applied Anatomy, College of Medicine, The Catholic University of Korea; 3 Department of Neurosurgery, Kangnam St. Mary's Hospital, College of Medicine, The Catholic University of Korea
- SP12** CLOSED REDUCTION OF DISLOCATIONS OF THE SUBAXIAL CERVICAL SPINE
L Kollintzas, M Tiliakos, N Kouris, E Saras, P Aggourakis, C Zachariou
 Scoliosis and Spine Surgery Unit, KAT General Hospital, Athens, Greece
- SP13** THE RISK OF CERVICAL WHIPLASH INJURIES AND WHIPLASH ASSOCIATED DISORDERS (WAD) IN ATHLETIC ACTIVITIES
Ch Matzaroglou, K Assimakopoulos, E Panagiotopoulos, P Zoumboulis, E. Heristanidu, P Megas, E Sourgiadaki, E Lambiris
 Departments of Orthopaedic Surgery, ENT and Psychiatry, Medical School, University of Patras, Greece
- SP14** CERVICAL RADICULOPATHY AND COEXISTING DISTAL ENTRAPMENT NEUROPATHIES: IDOUBLE-CRUSH SYNDROME?
N Specchia, M Martiniani, M De Benedetto
 Dept. Orthopaedics University of Ancona, Italy

Adult Thoracolumbar Spine

Chair: H. Berk, Ph. Gillet

- SP15** THE MEANING OF LUMBAR SPINAL STENOSIS. A CRITICAL REVIEW OF THE LITERATURE
M Alfonso, P Díaz de Rada, C Villas
 University Clinic of Navarre. Spain
- SP16** DOES COMPUTED TOMOGRAPHY PREDICT SOLID FUSION?
S Fucentese, M Haefeli, M Schmid, B Waelchli, J Hodler, N Boos
 Centre for Spinal Surgery, University of Zurich, Balgrist, Zurich, Switzerland
- SP17** SENSITIZATION OF THE NOCICEPTIVE SYSTEM IN PATIENTS WITH LOW BACK PAIN AND SICKNESS ABSENCE
OK Jensen¹, CV Nielsen², K Stengaard-Pedersen³
 (1)The Spine Center, Department of Internal Medicine, Region Hospital Silkeborg, (2) Department of Clinical Social Medicine, University of Aarhus, and (3) Department of Rheumatology, Aarhus University Hospital, Denmark

- SP18** A CROSS-SECTIONAL STUDY OF LOW BACK PAIN IN CHILDHOOD AND ADOLESCENT IN JAPAN
T Sato, T Ito, T Hirano, O Morita, R Kikuchi, N Endo, N Tanabe
 Division of Orthopedic Surgery, Department of Regenerative and Transplant Medicine, Niigata University Graduate School of Medical and Dental Science, Japan
- SP19** CHANGES IN THE SHAPE OF LIGAMENTUM FLAVUM, THE MAJOR CAUSE OF LOAD AND POSITION INDUCED ENCROACHMENT IN CENTRAL LUMBAR SPINAL STENOSIS
N Suzuki, H Hebelka, A Gaultz, T Hansson
 Orthopaedics and Radiology Sahlgrenska Academy, Göteborg University, Göteborg, Sweden and Nagoya City University, Nagoya, Japan
- SP20** MINI-OPEN POSTERIOR LUMBAR INTERBODY FUSION USING THE X-TUBE SYSTEM: A MINIMALLY INVASIVE SURGERY INVOLVING THE MULTIFIDUS MUSCLE
T Tsutsumimoto, M Shimogata, H Oota, Y Kyou, H Misawa
 Spine Center, Yodakubo Hospital, Nagano, Japan
- SP21** THE PREVALENCE OF DIFFUSE IDIOPATHIC SKELETAL HYPEROSTOSIS IN THE NETHERLANDS
LA Westerveld, HME Quarles van Ufford, FC Oner, JJ Verlaan
 University Medical Centre Utrecht, the Netherlands

Basic Science

Chair: S. Ferguson, H.J. Wilke

- SP22** FLOW PERFUSSION CULTURE OF HUMAN MESENCHYMAL STEM CELLS ON SYNTHETIC BONE GRAFT SCAFFOLDS
L Bjerre, CE Bünger, T Mygind
 Orthopaedic Research Laboratory, Aarhus University Hospital, Norrebrogade 44, Bldg. 1A, DK-8000 Aarhus
- SP23** DOES MILD INTERVERTEBRAL DISC DEGENERATION REALLY CAUSE INSTABILITY? EVALUATION OF A LARGE IN VITRO DATABASE
A Kettler, C Mack, L Claes, HJ Wilke
 Institute for Orthopaedic Research and Biomechanics, University of Ulm, Germany
- SP24** NUCLEUS PULPOSUS REGENERATION USING FRESH AUTOLOGOUS ADIPOSE-DERIVED CELLS
HJ Meisel, T Ganey, W Hutton, T Moseley, M Hedrick
 Neurosurgery - BG-Clinic Bergmannstrost Halle (Germany); Atlanta Medical Center (USA); Emory University Atlanta (USA), Cytori Therapeutics San Diego (USA)
- SP25** IN VIVO PORCINE DISC DEGENERATION MODEL FOR CELL-BASED THERAPEUTIC APPROACHES: EFFECTS OF PARTIAL NUCLEOTOMY
GW Omlor, W Richter, HJ Wilke, M Pfeiffer, AG Nerlich, M Schaaf-Keim, T Guehring
 Orthopädische Universitätsklinik Heidelberg, Germany, Institut für Unfallchirurgische Forschung und Biomechanik Universität Ulm, Germany, Abteilung Orthopädie HELIOS Rosmann Klinik Breisach am Rhein, Germany, Institut für Pathologie Klinikum München Bogenhausen, Germany, Berufsgenossenschaftliche Unfallklinik Ludwigshafen, Germany
- SP26** CELL PROLIFERATION OF THE DORSAL ROOT GANGLION AND SPINAL CORD EXPOSED TO NUCLEUS PULPOSUS ON NERVE ROOT IN RATS
K Otoshi, M Sekiguchi, S Konno, S Kikuchi
 Department of Orthopaedic Surgery, Fukushima Medical University School of Medicine, Japan
- SP27** LOADS ON A VERTEBRAL BODY REPLACEMENT MEASURED IN TWO PATIENTS
A Rohlmann, U Gabel, A Bender, R Kayser, F Graichen, G Bergmann
 Biomechanics Laboratory, Charité-Universitätsmedizin Berlin, Campus Benjamin Franklin, Berlin, Germany
- SP28** CLINICAL INVESTIGATION OF PMMA CEMENT VISCOSITY DURING VERTEBROPLASTY
KD Wheeler, B Schenk, A Boger, PF Heini
 Synthes GmbH, Oberdorf, Switzerland; Department of Orthopaedic Surgery, Inselspital, Bern, Switzerland

Motion Preservation Treatment

Chair: R. Gunzburg, A. van Ooij

- SP29** TWO YEAR CLINICAL RESULTS OF NUCLEUS REPLACEMENT USING AN IN SITU CURED, BALLOON CONTAINED, INJECTABLE POLYURETHANE DEVICE: FINDINGS FROM TWO PROSPECTIVE EUROPEAN MULTI-CENTER STUDIES
M Ahrens, P Donkersloot, F Martens, U Liljenqvist, H Halm, A Tsantrizos, J Sherman, HA Yuan, JC Le Huec
 1 University of Luebeck, Neustadt, Germany; 2 Virga Jesse Hospital, Hasselt, Belgium; 3 OLV Ziekenhuis Hospital, Aalst, Belgium; 4 University of Munster, Munster, Germany; 5 Disc Dynamics Inc., Eden Prairie, MN, USA; 6 Twin Cities Orthopedics, Minneapolis, MN, USA; 7 SUNY Upstate Medical University, Syracuse, NY, USA; 8 Victor Segalen University, Bordeaux, France
- SP30** EVIDENCE FOR ONE-LEVEL LUMBAR ARTHROPLASTY OR ARTHRODESIS FOR DEGENERATIVE DISC DISEASE: A COMPARISON OF TWO LUMBAR ARTHROPLASTY IDE STUDIES WITH 2-YEAR FOLLOW-UP
FH Geisler, RD Guyer, SL Blumenthal, PC McAfee, A Cappuccino, F Bitan, JJ Regan
 Illinois Neuro-Spine Center, Aurora, USA
- SP31** HOW DOES PREVIOUS SURGERY EFFECT CLINICAL OUTCOME WITH PRODISC-L?
J Goldstein
 NYU - Hospital for Joint Diseases, New Yorks, NY, USA
- SP32** RADIOGRAPHIC DISC CHANGES IN THE BRIDGED AND ADJACENT SEGMENTS FOLLOWING DYNESYS DYNAMIC STABILIZATION
A Kumar, J Beastall, E Karadimas, M Nicol, F Smith, D Wardlaw
 Woodend Hospital
- SP33** CLINICAL AND 3D ELECTRO-GONIOMETRIC PROSPECTIVE STUDY OF THE GLOBAL LUMBAR MOBILITY AFTER TOTAL LUMBAR DISC ARTHROPLASTY
A Lubansu, P Salvia, JB Dandine, M Rooze, J Brotchi, O Dewitte
 Département de Neurochirurgie, Centre d'Evaluation Fonctionnelle et Laboratoires d'Anatomie, Faculté de Médecine et Institut Supérieur d'Education Physique et de Kinésithérapie, Hôpital Erasme, Université Libre de Bruxelles, Bruxelles, Belgique
- SP34** METAL ION LEVELS IN PATIENTS WITH METAL-ON-METAL TOTAL DISC REPLACEMENT
GS Miz
 Bone & Joint Physicians, Oak Lawn, IL, USA
- SP35** SPINAL STENOSIS DECOMPRESSION AND COFLEXTM INTERSPINOUS STABILIZATION : I. CLINICAL RESULTS FROM AN INTERNATIONAL MULTICENTER RETROSPECTIVE STUDY
KA Poelstra, D Adelt, J Samani, WK Kim, M Eif, GL Lowery, RJ Chomiak
 University of Maryland, College Park, MD, USA; Ostseeklinik, Damp, Germany; Chirurgie Orthopedique, Lyon, France; Gachon Medical School, Gil Medical Center, Seoul, South Korea; Klinik fuer Neurochirurgie Stadtisches Klinikum, Goerlitz, Germany; Paradigm Spine, LLC, New York, NY, USA

15:20-15:50 BREAK

15:50 Thoracolumbar V: Fusion / Disc Prosthesis
Chair: U. Liljenqvist, A. Alanay

- 15:50 **56** THE EFFECT OF LENTIVIRAL GENE THERAPY WITH BONE MORPHOGENETIC PROTEIN-2-PRODUCING BONE MARROW CELLS ON SPINAL FUSION IN RATS
M Masashi, A Alanay, S Osamu, B Tow, Z Jun, W Feng, A Napoli, C Sintu, J Lieberman, J Wang
UCLA School of Medicine Comprehensive Spine Center, USA
- 16:00 **57** A PROSPECTIVE, RANDOMIZED, CONTROLLED, MULTI-CENTER STUDY OF OSIGRAFT® IN INSTRUMENTED POSTEROLATERAL FUSIONS
D Delawi, WJA Dhert, L Rillardon, E Gay, D Prestamburgo, C Garcia-Fernandez, FC Oner
Department of Orthopaedics, University Medical Center Utrecht, The Netherlands; Service Orthopedie, Hopital Beaujon, Paris, France; Service de Neurochirurgie, Hopital La Tronche, Grenoble, France; Ortopediche e Traumatologica Mario Boni, Ospedale di Circolo, Varese, Italy; Servicio De Cirurgia Ortopedica y Traumatologia. Hospital Clinico San Carlos, Madrid, Spain
- 16:10 **58** THE EFFECT OF ANTI-RESORPTIVE DRUGS ON THE HEALING PROCESS OF BONE GRAFT IN OVARIECTOMIZED RAT SPINAL ARTHRODESIS MODEL
M Takahata, M Ito, Y Abe, K Abumi, A Minami
Department of Orthopaedic Surgery, Hokkaido University, School of Medicine, Japan
- 16:20 **59** BONE GRAFTING OF THE DISC SPACE BY A UNILATERAL TRANSFORAMINAL APPROACH EQUALS THAT OBTAINED BY A BILATERAL POSTERIOR APPROACH IN LUMBAR INTERBODY FUSIONS
J François, P Lauweryns, P Brys
Dept. of Orthopaedic Surgery Dept. of Radiology, University Hospital Leuven 1, Weligerveld 3212 Leuven (Belgium)
- 16:30 **60** ILIAC CREST BONE GRAFT HARVESTING IN INSTRUMENTED POSTEROLATERAL LUMBAR FUSION: RELATION WITH FUSION RATES AND POSTOPERATIVE PAIN
C Schizas, D Triantafyllopoulos, V Kosmopoulos, K Stafylas
Hôpital Orthopédique de la Suisse Romande; Centre Hospitalier Universitaire Vaudois and University of Lausanne, Switzerland
- 16:40 **61** JUXTA-FUSIONAL LUMBAR DISC REPLACEMENT: CORRELATION BETWEEN CLINICAL OUTCOME AND SPINAL/ PELVIC ALIGNMENT
UR Hähle, I Weinberg, K Sliwa, GP Candy
University of the Witwatersrand, South Africa
- 16:50 **62** KINEFLEX LUMBAR DISC PROSTHESIS: TWO YEAR CLINICAL RESULTS AND RADIOLOGICAL PLACEMENT ACCURACY IN 100 PATIENTS
UR Hähle, IR Weinberg, K Sliwa, MBE Sweet, M De Villiers
University of the Witwatersrand, South Africa
- 17:00 **EuroSpine** GENERAL ASSEMBLY
Main hall
- 20:30 **GALA EVENING**
Attire: formal

Saturday, October 6, 2007

08:30 Deformity II
Chair: R. Hedlund, A. Kaelin

- 08:30 **63** IS THE LENGTH OF STERNUM CORRELATED WITH ETIOPATHOGENESIS OF SCHEUERMANN'S DISEASE? AN EPIDEMIOLOGICAL STUDY
E Fotiadis, E Kenanidis, E Samoladas, P Akritopoulos, A Grigoriadou, G Kapetanios, K Akritopoulou
1. Orthopaedic department of General Hospital of Veria, Greece; 2. Aristotle University of Thessaloniki, Medical School, Greece; 3rd Orthopaedic Department of Aristotle University of Thessaloniki, General Hospital Papageorgiou, Greece
- 08:40 **64** LOWER FAT MASS AS A RISK FACTOR OF CURVE SEVERITY IN PERIPUBERTAL ADOLESCENT IDIOPATHIC SCOLIOSIS PATIENTS
L Weiguo, Q Yong
Spine Surgery, Drum Tower Hospital, Nanjing University Medical School, Nanjing, China
- 08:50 **65** THE RADIOLOGICAL CHANGES AND COMPLICATIONS DURING THE FIRST THREE YEARS FOLLOWING ENDOSCOPIC SCOLIOSIS SURGERY
D Hay, M Izatt, C Adam, R Labrom, G Askin
Paediatric Spine Research Group, Mater's Childrens Hospital, South Brisbane, Queensland, Australia
- 09:00 **66** COMPARISON OF RADIOLOGICAL RESULTS OF SURGICAL TREATMENT OF ADOLESCENT IDIOPATHIC SCOLIOSIS FROM ANTERIOR APPROACH WITH BONE-ON-BONE TECHNIQUE AND POSTERIOR APPROACH
D Zarzycki, T Potaczek, A Winiarski, B Jasiewicz, G Makiela, P Radlo
Department of Orthopaedic Surgery and Rehabilitation. Faculty of Medicine, Jagiellonian University, Zakopane, Poland
- 09:10 **67** RESTORATION OF THORACIC KYPHOSIS BY POSTERIOR INSTRUMENTATION IN ADOLESCENT IDIOPATHIC SCOLIOSIS. COMPARATIVE ANALYSIS OF TWO METHODS OF REDUCTION
JL Clement, E Chau, C Kimkpe, MJ Vallade
Orthopaedic Paediatric and Scoliosis Surgical Department - Lenval Hospital - Nice - France

- 09:20 **68** POSTERIOR ONLY PEDICLE SCREW INSTRUMENTATION WITH INTRAOPERATIVE HALO-FEMORAL TRACTION IN THE SURGICAL TREATMENT OF SEVERE SCOLIOSIS (>100DEGREES)
*M Tezer, O Karatoprak, C Ozturk, M Aydogan, M Teli, A Hamzaoglu
Istanbul Spine Center, Florence Nightingale Hospital, Turkey*
- 09:30 **69** SCHEUERMANN KYPHOSIS CORRECTION: POSTERIOR-ONLY VERSUS COMBINED ANTERIOR/POSTERIOR FUSION
*M Di Silvestre, F Lolli, G Bakaloudis, P Parisini
Spine Surgery Department, Istituto Ortopedico Rizzoli, Bologna*
- 09:40 **70** CAN WE STOP FUSION DISTALLY AT L3 INSTEAD OF L4 IN THE SURGICAL TREATMENT OF ADOLESCENT IDIOPATHIC SCOLIOSIS WITH LENKE TYPE 3C, 5C AND 6C CURVES
*O Karatoprak, M Teli, C Mirzanli, M Aydogan, C Ozturk, M Tezer, A Hamzaoglu
Istanbul Spine Center, Florence Nightingale Hospital, Turkey*
- 09:50 **71** BIOMECHANICAL EFFECT OF CROSSLINKS AFTER PEDICLE SUBTRACTION OSTEOTOMY
*TR Kuklo, AE Dmitriev, MJ Cardoso, RA Lehman Jr., M Erickson, NW Gill
Washington University School of Medicine in St. Louis, USA*

10:00-10:30 BREAK

10:30	Cervical Spine II Chair: J. Casamitjana, C. Logroscino
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- 10:30 **72** THORACIC PEDICLE SUBTRACTION OSTEOTOMY FOR FIXED SAGITTAL DEFORMITY: CLINICAL AND RADIOGRAPHIC OUTCOMES
*TR Kuklo, B O'Shaughnessy, SL Ondra
Washington University School of Medicine in St. Louis, USA*
- 10:40 **73** MORPHOLOGICAL STUDY OF THE LOWER CERVICAL CURVE: RESULTS IN 230 ASYMPTOMATIC SUBJECTS
*A Faline¹, M Szadkowski¹, E Berthonnaud¹, V Fièrè², R Roussouly¹
1) Department of Spinal Surgery - Centre Orthopedique Santy, 69008 Lyon, France; 2) Centre Médico Chirurgical des Massues, 69005 Lyon, France*
- 10:50 **74** THE EFFECT OF A VIRTUAL REALITY CERVICAL MOTION CONTROL SYSTEM AND RESISTANCE TRAINING WITH SIX DEGREES OF FREEDOM ON STRENGTH, HYPERTROPHY AND VISUAL MOTION CONTROL OF NECK MUSCLES
*C Dehner, M Elbel, M Kramer
Clinic for Traumasurgery, Plastic-, Hand- and Reconstructive Surgery, University of Ulm, Germany*
- 11:00 **75** CT SCAN STUDY OF ATLANTO-AXIAL ROTATORY MOBILITY IN ASYMPTOMATIC ADULT SUBJECTS. A BASIS FOR BETTER UNDERSTANDING C1C2 ROTATORY FIXATION AND SUBLUXATION
*JE Mönckeberg, M Alfonso, A Alonso, JE Vasquez, JL Zubieta, C Villas
University Clinic of Navarra.Pamplona, Spain*
- 11:10 **76** PAIN IN NECK, SHOULDER AND BACK ASSOCIATED TO STRESS BIOMARKERS IN HEALTHY MEDIA WORKERS. 12-MONTH PROSPECTIVE FOLLOW UP
*H Saraste, E Schell, T Theorell, D Hasson, B Arnetz
Karolinska Institutet, Uppsala Universitet, Sweden*
- 11:20 **77** CHARACTERISTICS OF NECK-SHOULDER PAIN ("KATAKORI" IN JAPANESE)
*Y Iizuka, T Shinozaki, T Ara, H Iizuka, K Takagishi
Department of Orthopaedic Surgery, Gunma University Graduate School of Medicine, Japan*
- 11:30 **78** PREOPERATIVE EVALUATION OF THE CERVICAL SPINE MYELOPATHY WITH FLEXION-EXTENSION MRI: ABOUT A PROSPECTIVE STUDY OF 50 PATIENTS
*H Pascal-Moussellard, L Zhang, D Zeitoun, JY Lazennec, Y Catonné
Orthopaedic department, CHU Pitié-Salpêtrière, Paris, France*
- 11:40 **79** CUTANEOUS SILENT PERIODS FOR EVALUATION OF CERVICAL SPONDYLOTIC MYELOPATHY
*I Stetkarova, J Chrobok, M Kofler
(a) Department of Neurology, Na Homolce Hospital, Prague 5, Czech Republic, (b) Department of Neurosurgery, Na Homolce Hospital, Prague 5, Czech Republic(c) Hospital Hochzirl, Zirl, Austria*
- 11:50 **80** OBLIQUE MRI AS A USEFUL ADJUVANT IN A PRECISE DIAGNOSIS OF CERVICAL FORAMINAL IMPINGEMENT
*J Shim, C Park, D Lee, D Kim, J Kim, J Hwang
Department of Neurosurgery, The Leon Wiltse Memorial Hospital, Suwon, Korea*

12:00 CLOSING REMARKS - END