



EUROSPINE 2015

Scientific Programme - oral presentations

V_JULY 10, 2015

Tuesday, September 1, 2015

- 10:00 on-site Registration and pre-day courses
- 17:00-19:00 EUROSPINE on-site Registration with a free drink when taking advantage of registering the evening beforehand!

Wednesday, September 2, 2015

- 07:30 on-site Registration
- 08:30 **OPENING**
Local Hosts
- 08:33 **WELCOME ADDRESS**
EUROSPINE President, Haluk Berk, Izmir, Turkey
- 08:36 **INTRODUCTION TO THE SCIENTIFIC PROGRAMME**
The blinded peer review process of the program committee
Thomas Blattert, Schwarzach, Germany, Chair Program Committee 2015

08:40 – 10:00 **Thoraco-Lumbar Spine, Degenerative I**
Room: Plenary Hall

- 1 ANNULAR REPAIR USING FIBROCHONDROCYTES SEEDS IN A CROSS-LINKED COLLAGEN GEL: IN VIVO OUTCOME IN A RODENT MODEL.**
Yu Moriguchi, Brandon Borde, Peter Grunert, Tamina Khair, Lawrence Bonassar, Roger Härtl
Weill Cornell Medical College
- 2 PESSIMISTIC BACK BELIEFS AND LACK OF EXERCISE: A RISKY COMBINATION FOR FUTURE SHOULDER, NECK, AND BACK PAIN**
Anne F Mannion, Urs Müller, C Rolli, O Tamcan, Achim Elfering
Spine Center, Schulthess Klinik, Zurich; Institute for Psychology, University of Bern; Institute for Evaluative Research in Orthopaedic Surgery, University of Bern
- 3 THE PROGNOSIS OF L5 RADICULOPATHY AFTER REDUCTION AND INSTRUMENTED FUSION OF ADULT ISTHMIC HIGH-GRADE LUMBOSACRAL SPONDYLOLISTHESIS AND THE ROLE OF MULTIMODAL INTRAOPERATIVE NEUROMONITORING**
Ralph T. Schär, Martin Sutter, Anne F. Mannion, Andreas Eggspühler, Dezsö Jeszenszky, Tamas Fekete, Frank Kleinstück, Daniel Haschtmann

*Department of Neurosurgery, Inselspital, University of Bern, Bern, Switzerland
Spine Center, Schulthess Clinic, Zurich, Switzerland*

- 4** MINI-OPEN VERSUS OPEN TRANSFORAMINAL INTERBODY FUSION FOR LUMBAR DEGENERATIVE DISORDERS: A COMPARATIVE EFFECTIVENESS STUDY
Frank S Kleinstück, Daniel Haschtmann, Tamas F Fekete, Dezsö Jeszenszky, Anne F Mannion

Schulthess Klinik, Zürich, Switzerland

- 5** GLOBAL TILT AND LUMBAR LORDOSIS INDEX: TWO PARAMETERS TO UNDERSTAND POSITIVE BALANCE ANALYSIS
Louis Boissiere, Jean-Marc Vital, Vincent Challier, Ahmet Alanay, Ferran Pellisé Urquiza, Francisco Javier Sanchez Perez-Grueso, Emre Acaroglu, Frank Kleinstück, Ibrahim Obeid, ESSG European Spine Study Group

*Spine Unit 1, Bordeaux University Hospital, Bordeaux, France
ESSG, Hospital Universitari Vall Hebron, Barcelona, Spain*

- 6** THORACIC CURVE IN ADULT IDIOPATHIC SCOLIOSIS: A DIMINISHING PROBLEM WITH INCREASING AGE

Javier Pizones, Mar Pérez Martín-Buitrago, Francisco Javier Sánchez Pérez-Grueso, Ferrán Pellisé, Ahmet Alanay, Ibrahim Obeid, Frank Kleinstück, Emre Acaroglu, ESSG European Spine Study Group

Hospital Universitario de Getafe, Madrid, Spain

- 7** IDENTIFYING THE BEST TREATMENT IN ADULT SPINAL DEFORMITY (ASD): A DECISION ANALYSIS (DA) APPROACH

Emre Acaroglu, Aysun Cetinyurek-Yavuz, Umit Ozgur Guler, Selcen Pehlivan, Yasemin Yavuz, Montse Domingo-Sabat, Ferran Pellise, Francesco Sanchez Perez Grueso, Ahmet Alanay, Frank Kleinstück, Ibrahim Obeid, ESSG

1) Ankara Spine Center, Ankara TR; 2) Clinistats EU, Zurich, CH; 3) Hospital Universitari Vall d'Hebron, Barcelona, E; 4) Acibadem Maslak Hospital, Istanbul, TR; 5) Hospital Universitari La Paz, Madrid, E; 6) Schulthess Clinic, Zurich, CH; 7) Bordeaux University Hospital, Bordeaux, F

- 8** POSTERIOR VERTEBRAL COLUMN RESECTION (PVCR) FOR THE MANAGEMENT OF SHARP ANGULAR KYPHOTIC DEFORMITY IN ADULT POPULATION

Meric Enercan, Sinan Kahraman, Bahadir Gokcen, Sinan Yilar, Tunay Sanli, Erden Erturer, Cagatay Ozturk, Ufuk Talu, Azmi Hamzaoglu

I am working as a spine surgeon at Istanbul Spine Center, Istanbul Florence Nightingale Hospital since 2011

10:00-10:30 BREAK

10:30 – 12:00 Debates Room: Plenary Hall

10:30 Debate 1: Evidence-based practice: a way to reconcile science and the practitioner's and patient's perspectives, or just a pain in the neck?

Rachid Salmi, Bordeaux, France

Moderator: Finn Bjarke Christensen, Aarhus, Denmark

11:15 Debate 2: Spinal Cord Injury without structural affections in the elderly

Moderator: Selçuk Palaoğlu, Ankara, Turkey

Against: Tim Pigott, Liverpool, UK

For: Bernhard Jeanneret, Basel, Switzerland

12:00-14:00 EUROSPINE LUNCH SYMPOSIA, Wednesday

12:00 EUROSPINE LUNCH SYMPOSIUM 1
Adult deformity in the cervical spine. Treatment concepts

12:00 EUROSPINE LUNCH SYMPOSIUM 2
Rehabilitation impact on spinal

14:00 – 15:20 Cervical Spine
Room: Plenary Hall

- 9** CERVICAL KYPHOSIS DOES NOT IMPLY CERVICAL DEFORMITY: PREDICTING CERVICAL CURVATURE REQUIRED FOR HORIZONTAL GAZE BASED ON SPINAL GLOBAL ALIGNMENT AND THORACIC KYPHOSIS.
Vincent Challier, Bassel Diebo, Jonathan Oren, Shaleen Vira, Barthelemy Liabaud, Renaud Lafage, Jensen Henry, Themistocles Protopsaltis, Frank Schwab, Virginie Lafage
NYU Hospital for Joint Diseases
- 10** CERVICAL INTERBODY FUSION WITH STANDALONE LORDOTIC TANTALUM CAGES. CHANGES IN SAGITTAL ALIGNMENT. DO THE SUBSIDENCE HAVE CLINICAL IMPLICATIONS? A PROSPECTIVE LONG-TERM STUDY
Félix Tomé-Bermejo, Julián A MORALES-VALENCIA, Javier MORENO-PÉREZ, Angel R. PiÑera, Luis Alvarez
Spine Department. Fundación Jiménez Díaz University Hospital, Madrid, Spain
- 11** PROSPECTIVE MULTICENTER ASSESSMENT OF EARLY COMPLICATION RATES ASSOCIATED WITH ADULT CERVICAL DEFORMITY (ACD) SURGERY IN 78 PATIENTS
Justin Smith, Christopher Shaffrey, Themistocles Protopsaltis, Peter Passias, Gregory Mundis, Robert Hart, Han Jo Kim, Christopher Ames
International Spine Study Group
- 12** CERVICAL SPINE INTERVERTEBRAL DISC AND PARASPINAL MUSCLE CHANGES IN HUMANS AFTER 6-MONTH MICROGRAVITY EXPOSURE AND 30-DAY TERRESTRIAL RECOVERY
Douglas G. Chang, Robert M. Healey, Jacquelyn A. Holt, Brandon R. Macias, Alex J. Snyder, Jeffrey C. Lotz, Alan R. Hargens
University of California, San Diego and San Francisco, USA
- 13** IS THE UNILATERAL STABILIZATION IN THE SUBAXIAL CERVICAL SPINE SUFFICIENT? A BIOMECHANICAL STUDY
Gregor Schmeiser, Christoph Schilling, T M Grupp, K Püschel, Ralph Kothe
Schön Klinik Hamburg- Eilbek, Spinale Chirurgie, Hamburg
- 14** ASSESSMENT OF SWALLOWING FUNCTION USING EAT-10: A SWALLOWING ASSESSMENT TOOL
Chikato Mannoji, Masaaki Aramomi, Masao Koda, Takeo Furuya, Masazumi Murakami
Chiba Aoba Municipal Hospital
- 15** 4-YEAR RESULTS OF A PROSPECTIVE MULTI-CENTRE STUDY ON 200 SINGLE-LEVEL CERVICAL DISC PROSTHESES: CLINICAL AND RADIOGRAPHIC OUTCOME
Petr Suchomel, Hans Joerg Meisel, Ian Shackelford, Jussi Antinheimo, Steffen Sola, Bernhard Bruchmann, Jan Stulik, Fabrizio Caroli, Stefan Kroppenstedt, Christian Woiciechowsky
Neurocenter, Dpt.Neurosurgery, Regional Hospital Liberec, Czech Republic

- 16** CERVICAL TDR WITH MOBILE PROSTHESIS: MID-TERM CLINICAL ASSESSMENT AND RADIOLOGICAL ANALYSIS OF OPERATED AND ADJACENT SEGMENTS
Jacques Beaurain, Thierry Dufour, Jean Huppert, Pierre Bernard, Istvan Hovorka, Jean-Paul Steib
University Hospital Bocage central; Neurosurgery Department, 14 Rue Paul Gaffarel, Dijon, France
- 17** TOTAL DISC ARTHROPLASTY VERSUS ANTERIOR CERVICAL INTERBODY FUSION: USE OF THE SPINE TANGO REGISTRY TO SUPPLEMENT THE EVIDENCE FROM RCTS
Emin Aghayev, Anne Mannion, Christoph Röder, Lukas Staub
Institute for Evaluative Research in Medicine of the University of Bern
- 18** CLINICAL AND RADIOLOGICAL OUTCOME AT THE 10 YEAR FOLLOW UP OF TOTAL CERVICAL DISC REPLACEMENT
Christoph Mehren, Franziska Heider, Bernhard Zillner, Daniel Sauer, Christoph Siepe, Andreas Korge, H. Michael Mayer
Schön Klinik München Harlaching

15:20-15:50 **BREAK**

<p>15:50 – 17:30 Trauma, Tumor Room: Plenary Hall</p>

- 19** FLOWCYTOMETRIC EVALUATION OF INTRAOPERATIVE SALVAGED BLOOD FILTERED WITH LEUCOCYTE DEPLETION FILTER IN METASTATIC SPINE TUMOUR SURGERY
Naresh Kumar, Aye Sandar Zaw, Rishi Malhotra
National University Health System
- 20** IMMUNOGENICITY OF HUMAN INDUCED PLURIPOTENT STEM CELLS-DERIVED NEURAL STEM CELLS AS A CELL SOURCE OF CELL TRANSPLANTATION THERAPY FOR SPINAL CORD INJURY
Masahiro Ozaki, Go Itakura, Hiroki Iwai, Jun Kohyama, Akio Iwanami, Morio Matsumoto, Hideyuki Okano, Masaya Nakamura
Department of Orthopaedic Surgery, Keio University School of Medicine, Tokyo, Japan
- 21** EVALUATION OF TLICS FOR THORACOLUMBAR FRACTURES
Galateia Katzouraki, Spyridon Koufos, Giuseppe Lambros Morassi, Panayiotis Karampinas, Dimitrios Stergios Evangelopoulos, Spiros George Pneumaticos
3rd Department of Orthopaedic Surgery, University of Athens, KAT Hospital, Athens, Greece
- 22** TOWARDS THE DEVELOPMENT OF INTERNATIONAL DISEASE SPECIFIC OUTCOME INSTRUMENTS FOR SPINE TRAUMA: SURGEON REPORTED OUTCOME
Said Sadiqi, A Mechteld Lehr, F Cumhur Oner, AOSpine Knowledge Forum Trauma
1 Department of Orthopaedics, University Medical Center Utrecht, The Netherlands
2 AOSpine Knowledge Forum Trauma
- 23** OPEN VERSUS PERCUTANEOUS INSTRUMENTATION IN THORACOLUMBAR FRACTURES: MRI COMPARISON OF PARVERTEBRAL MUSCLES AFTER IMPLANT REMOVAL
Yann Philippe Charles, Yves Ntilikina, David Bahlau, Julien Garnon, Sébastien Schuller, Axel Walter, Erik André Sauleau, Mickael Schaeffer, Steib Jean-Paul
Service de Chirurgie du Rachis, Hôpitaux Universitaires de Strasbourg, France
- 24** TEMPORARY PEDICLE SCREW FIXATION FOR THORACOLUMBAR BURST FRACTURES. -COMPARATIVE STUDY WITH OR WITHOUT VERTEBROPLASTY-
Hiroyuki Aono, Keisuke Ishii, Hidekazu Tobimatsu, Yukitaka Nagamoto, Chiaki Horii, Motoki Iwasaki
Osaka National Hospital

- 25** IMPLANT REMOVAL RESTORES MOBILITY AFTER FRACTURE OF THE THORACOLUMBAR SEGMENT. A RADIOSTEREOMETRIC STUDY.
Paul Axelsson, Björn Strömqvist
Department of Orthopaedics, Skåne University Hospital, 205 01 Malmö
- 26** OSTEOPOROTIC THORACOLUMBAR JUNCTIONAL VERTEBRAL BODY FRACTURE WITH A SPINOUS PROCESS FRACTURE: ITS CLINICAL AND RADIOLOGIC SIGNIFICANCES
Tae-Hwan Kim
Hallym University Sacred Heart Hospital
- 27** THE VALUE OF BONE BIOPSY DURING PERCUTANEOUS VERTEBROPLASTY IN TREATMENT OF PRESUMED OSTEOPOROTIC VERTEBRAL COMPRESSION FRACTURES
Bahadır Gokcen, Meric Enercan, Emel Kaya, Sinan Kahraman, Sinan Yilar, Mutlu Cobanoglu, Tunay Sanli, Erden Erturer, Cagatay Ozturk, Azmi Hamzaoglu
Istanbul Spine Center
- 28** THE ROLE OF SINS (SPINAL INSTABILITY NEOPLASTIC SCORE) SYSTEM TO PREDICT THE INSTABILITY IN METASTATIC SPINAL TUMORS.
Sejun Park, ChongSuh Lee, Junyoung Lee, Sangsoo Kang, Wansseok Kim, Seongkee Shin, Kyungchung Kang
Samsung medical center
- 29** CLINICAL AND RADIOLOGICAL OUTCOME AFTER TOTAL EN BLOC SPONDYLECTOMY AT THREE OR MORE LEVELS
Katsuhito Yoshioka, Hideki Murakami, Satoru Demura, Satoshi Kato, Moriyuki Fujii, Takashi Igarashi, Noritaka Yonezawa, Hiroyuki Tsuchiya
Department of Orthopaedic Surgery, Kanazawa University
- 30** RESECTION OF VERTEBRAL OSTEIOD OSTEOMAS IN FULL-ENDOSCOPIC TECHNIQUE IN ADOLESCENTS.
Semih Özdemir, Patrick Hahn, Martin Komp, Harry Merk, Georgios Godolias, Sebastian Ruetten
Center for Spine Surgery and Pain Therapy; Center for Orthopaedics and Traumatology of the St. Elisabeth Group - Catholic Hospitals Rhein-Ruhr, St. Anna Hospital Herne, Marienhospital Herne University Hospital, Marien Hospital Witten, Germany

17:30

WELCOME RECEPTION

Exhibition Area

Thursday, September 3, 2015

08:30 – 10:00 Degenerative, Scoliosis
Room: Plenary Hall

- 31** THE HISTOMORPHOLOGICAL CHANGE OF THE GROWTH PLATE UNDER ASYMMETRICAL LOADING IN PORCINE SCOLIOSIS MODEL
Xin Zheng, Yong Qiu, Xu Sun, Bangping Qian, Zezhang Zhu, Yang Yu, Bin Wang
From the Spine Surgery, Drum Tower Hospital, Nanjing University Medical School, Nanjing, China.
- 32** PROXIMAL JUNCTIONAL KYPHOSIS: EFFECT OF MULTILEVEL POSTERIOR LIGAMENT DISSECTION AFTER POSTERIOR INSTRUMENTATION ON ADJACENT SEGMENT BIOMECHANICS.
Tobias Lange, Raul Mayr, Georg Gosheger, Christian Heinrichs, Werner Schmölz, Tobias L. Schulte
Department of Orthopedics, University Hospital Münster

- 33** 3D MOTION ANALYSIS IN LUMBAR SPINAL STENOSIS WITH DEGENERATIVE SPONDYLOLISTHESIS BEFORE AND AFTER DECOMPRESSIVE SURGERY USING PROVOCATION COMPUTED TOMOGRAPHY. AN RCT COMPARING LAMINECTOMY TO BILATERAL FORAMINOTOMY.
Peter Försth, Per Svedmark
Uppsala University / Stockholm Spine Center
- 34** DOES THE FACET JOINT VIOLATION FOLLOWING TRANSPEDICULAR INSTRUMENTATION OF THE LUMBAR SPINE CAUSE ADJACENT SEGMENT PATHOLOGY OR NOT? : A MATCHED CONTROL STUDY
Chang-Hoon Jeon, Nam-Su Chung, Han-Dong Lee
Ajou university school of medicine
- 35** PROTECTIVE EFFECTS OF ADJACENT SEGMENT DEGENERATION AFTER LUMBAR FUSION WITH POSTERIOR LIGAMENTS COMPLEX PRESERVED IN EIGHT-YEAR MINIMUM FOLLOW-UP
Liang Yan, Baorong He, Dingjun Hao
Hong Hui Hospital, Xi'an Jiaotong University College of Medicine
- 36** PROPIONIBACTERIUM ACNES, HERNIATED DISC AND MODIC CHANGES. NO CORRELATION FOUND IN 80 PATIENTS
Laura Mathiesen, Anne Kirstine Hansen, Mikala Wang, Thomas Bender, Peter Lemche, Soeren Fruensgaard, Malene Laursen
Regional Hospital Silkeborg; Center of Elective Surgery
- 37** THE LONG-TERM OUTCOME OF LUMBAR FUSION IN THE SWEDISH LUMBAR SPINE STUDY
Rune Hedlund, Christer Johansson, Olle Hägg, Peter Fritzell, Tycho Tullberg
Sahlgrenska University Hospital, Department of Orthopedics, Gothenburg, Sweden
- 38** REVISION SURGERY FOR RESOLVING LUMBAR INTERSPINOUS DEVICE FAILURE
Dong-Hwa Heo, Seung-Hwan Yoon
The Leon Wiltse Memorial Hospital
College of medicine, Inha university
- 39** ASSOCIATED LUMBAR SCOLIOSIS DOES NOT AFFECT OUTCOMES IN PATIENTS UNDERGOING FOCAL MINIMALLY INVASIVE TRANSFORAMINAL LUMBAR INTERBODY FUSION (MISTLIF) FOR NEUROGENIC SYMPTOMS: A MINIMUM 2-YEAR FOLLOW-UP STUDY
Anupreet Bassi, Kae Sian Tay, William Yeo, Wai Mun Yue
Singapore General Hospital, Singapore
- 40** ROLE OF LUMBAR INTERBODY FUSION IN ADULT SPINAL DEFORMITY SURGERIES: DOES THE NUMBER OF CAGES MATTER?
Vincent Fièvre, Evalina L Burger, Michael S. Chang, Sean Molloy
Centre Orthopédique Santy France; University of Colorado SOM, US; Sonoran Spine, US; NHS Royal National Orthopaedic Hospital UK
- 41** CLINICAL DISCRIMINATION PROPERTIES OF THE SRS-SCHWAB CLASSIFICATION IN 292 NON-US ADULT SPINAL DEFORMITY PATIENTS
Dennis Hallager Nielsen, Lars Valentin Hansen, Casper Rokkjær Dragsted, Nina Caroline Peytz, Martin Gerhchen, Benny Dahl
Spine Unit, Department of Orthopaedic Surgery, Rigshospitalet, University of Copenhagen, Copenhagen, Denmark

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

10:30 – 12:00 **Presidential Address, Medal and Awards Lectures**
Room: Plenary Hall

- 10:30 **Winner of the 2015 EUROSPINE Full Paper Award**
AGE AND PRO-INFLAMMATORY GENE POLYMORPHISMS INFLUENCE ADJACENT SEGMENT DISC DEGENERATION MORE THAN FUSION DOES IN PATIENTS TREATED FOR CHRONIC LOW BACK PAIN
*Ahmad Omair*¹, *Anne F Mannion*², *Marit Holden*³, *Gunnar Leivseth*⁴, *Jeremy Fairbank*⁵, *Olle Hägg*⁶, *Peter Fritzell*⁷, *Jens I Brox*⁸
1 Department of Orthopaedics, Oslo University Hospital-Rikshospitalet, Oslo, Norway; 2 Department of Research and Development, Spine Center Division, Schulthess Klinik, Zürich, Switzerland; 3 Norwegian Computing Centre, Blindern, Oslo, Norway; 4 Institute of Clinical Medicine, Neuromuscular Disorders Research Group, UiT the Arctic University of Norway, Tromsø; 5 Nuffield Orthopaedic Centre, University of Oxford, Oxford, United Kingdom; 6 Spine Center Göteborg, Gothenburg, Sweden; 7 Neuro-ortopedic center, Länssjukhuset Ryhov, Jönköping, Sweden; 8 Department of Physical Medicine and Rehabilitation, Oslo University Hospital, University of Oslo, Oslo, Norway
- 10:40 **Winner of 2014/2015 Grammer/European Spine Journal Award**
- 10:50 **EUROSPINE Presidential Address**
Haluk Berk, Izmir, Turkey
- 11:20 Society update (TFR, Membership)
- 11:30 EUROSPINE Medal Lecture 2015

12:00-14:00 EUROSPINE LUNCH SYMPOSIUM, Thursday

- 12:00 **EUROSPINE LUNCH SYMPOSIUM 3**
Neuromuscular and early onset scoliosis. Are new techniques better?
- 12:15 MAGEC rod
Ilkka Helenius, Helsinki, Finland
- 12:10 Discussion
- 12:30 Growth of the Spine and Thorax
Alain Dimeglio, Montpellier, France
- 12:25 Discussion
- 12:45 EOS Classification and Natural History
Muharrem Yazici, Ankara, Turkey
- 12:55 Discussion
- 13:00 Non-Operative Treatment Thoracic Insufficiency Syndrome
Martin Repko, Brno, Czech Republic
- 13:10 Discussion

- 13:15 Complications and Outcomes
Francisco Sanchez Perez Grueso, Spain
- 13:25 Discussion
- 13:30 What is New on the Horizon for EONMS? When You Start Treatment for EONMS and What are the Options?
Hossein Mehdian, Nottingham, UK
- 13:40 Discussion

12:00 **EUROSPINE LUNCH SYMPOSIUM 4**
Anterior approach is back to stay?

14:00 – 15:20	Thoraco-Lumbar Spine, Degenerative II Room: Plenary Hall
---------------	--

- 42** COMBATING OXIDATIVE STRESS-INDUCED PREMATURE SENESCENCE (SIPS) IN THE INTERVERTEBRAL DISC (IVD)
Olga Krupkova, Sonia Rossi, Marian Hlavna, Juergen Klasen, Stephen J Ferguson, Karin Wuertz-Kozak
D-HEST, ETH Zurich
- 43** REPEATED 3.0 TESLA MAGNETIC RESONANCE IMAGING AFTER CLINICALLY SUCCESSFUL LUMBAR DISC SURGERY
Clemens Weber, Øystein Petter Nygaard, Ole Solheim, Sasha Gulati
Dept. of Neurosurgery, Stavanger University Hospital, Stavanger, Norway
Dept. of Neuroscience, Norwegian University of Science and Technology, Trondheim, Norway
- 44** EFFICACY AND SAFETY OF CONDOLIASE IN PATIENTS WITH LUMBAR DISC HERNIATION: A PROSPECTIVE RANDOMIZED CONTROLLED CLINICAL TRIAL
Kazuhiro Chiba, Yukihiro Matsuyama
Department of Orthopaedic Surgery, National Defense Medical College; Department of Orthopaedic Surgery, Hamamatsu University School of Medicine, The Japanese SI-6603 Study Group
- 45** INCIDENTAL DURA LESIONS AND THE EFFECT ON OUTCOME AFTER DECOMPRESSION FOR LUMBAR SPINAL STENOSIS: RESULTS OF A MULTI-CENTER STUDY WITH 980 PATIENTS
Ralph Kothe, Markus Quante, Nils Engler, Franziska Heider, Christoph Siepe
Schön Klinik Hamburg Eilbek
- 46** DOES DAILY TOBACCO SMOKING AFFECT OUTCOMES AFTER MICRODECOMPRESSION FOR DEGENERATIVE CENTRAL LUMBAR SPINAL STENOSIS? A MULTICENTER OBSERVATIONAL REGISTRY-BASED STUDY
Charalampis Giannadakis, Sasha Gulati, Ulf Nerland, Ole Solheim
Department of Neurosurgery, St. Olavs University Hospital, Trondheim, Norway
- 47** COMPARISON OF DIBOTERMIN ALFA WITH AUTOGRAFT FOR SINGLE-LEVEL LUMBAR INTERBODY ARTHRODESIS USING POOLED INDIVIDUAL PATIENT DATA AND META-ANALYSIS
Kenneth Burkus, David Donnell, Koen van der Heijden, Fujian Song
The Hughston Clinic; Medtronic BioPharma B.V.; UEA Consulting Limited
- 48** DOES LORDOTIC ANGLE OF CAGE DETERMINE LUMBAR LORDOSIS IN POSTERIOR LUMBAR INTERBODY FUSION?
Young-Tae Kim, Kyu-Jung Cho
Inha University Hospital

- 49** PLIF SURGERY WITH EITHER PEEK OR TITANIUM-COATED PEEK-CAGES. A RANDOMISED CLINICAL AND RADIOLOGICAL TRIAL.
Klaus Schnake, Nikolai Fleiter, Andreas Pingel, Christoph Hoffmann, Matti Scholz, Frank Kandziora
Center for Spinal Therapy; Schön Klinik Nürnberg Fürth, Germany
- 50** LEG PAIN IS A POSSIBLE SAGITTAL MALALIGNMENT CLINICAL PRESENTATION IN ADULT SPINAL DEFORMITY SURGERY
Mitsuru TAKEMOTO, Louis Boissiere, Ibrahim Obeid, Jean-Marc Vital, Ferran Pellisé, Francisco Javier Sanchez Perez-Gruoso, Frank Kleinstuck, Emre R. Acaroglu, Ahmet Alanay, ESSG European Spine Study Group
Spine Unit 1, Bordeaux University Hospital
- 51** RISK FACTORS ASSOCIATED WITH MECHANICAL COMPLICATIONS INCLUDING PROXIMAL JUNCTIONAL FAILURE AFTER OSTEOTOMY FOR ADULT SPINAL DEFORMITY
Evalina Burger, Cameron Barton, Andriy Noshchenko, Vikas Patel, Christopher Cain, Christopher Kleck
University of Colorado, Anschutz Medical Campus

15:20-15:50 **BREAK**

<p>15:50 – 17:30 Thoraco-Lumbar Spine, Degenerative III Room: Plenary Hall</p>
--

- 52** COMPARISON OF AN ANTI-INFLAMMATORY DRUG DELIVERY SYSTEM VERSUS MSC THERAPY TO CONTROL INFLAMMATION IN A PRO-INFLAMMATORY INTERVERTEBRAL DISC ORGAN CULTURE SYSTEM
Graciosa P.Q. Teixeira, Catarina L. Pereira, Karin Benz, Hans-Joachim Wilke, Anita Ignatius, Mario A. Barbosa, Raquel Goncalves, Cornelia Neidlinger-Wilke
1Institute of Orthopaedic Research and Biomechanics, Center for Musculoskeletal Research, University of Ulm, Germany, 2Institute of Biomedical Engineering (INEB), Universidade do Porto, Portugal, 3Instituto de Ciências Biomédicas Abel Salazar (ICBAS), Universidade do Porto, Portugal, 4NMI Natural and Medical Sciences Institute at the University of Tuebingen, Reutlingen, Germany; (, equal contribution)*
- 53** DOES A PREOPERATIVE COGNITIVE-BEHAVIOURAL INTERVENTION AFFECT DISABILITY, PAIN BEHAVIOUR, PAIN AND RETURN TO WORK AFTER LUMBAR SPINAL FUSION SURGERY?
Nanna Rolving, Claus Vinther Nielsen, Finn Bjarke Christensen, Randi Holm, Cody Erik Bünger, Lisa Gregersen Oestergaard
Aarhus University Hospital
- 54** PREOPERATIVE COGNITIVE-BEHAVIOURAL PATIENT EDUCATION VERSUS STANDARD CARE AFTER LUMBAR SPINAL FUSION: ECONOMIC EVALUATION ALONGSIDE A RANDOMIZED CONTROLLED TRIAL
Nanna Rolving, Rikke Soegaard, Claus Vinther Nielsen, Finn Bjarke Christensen, Cody Erik Bünger, Lisa Gregersen Oestergaard
Aarhus University Hospital
- 55** QUALITY OF LIFE AND DISABILITY: CAN THEY BE IMPROVED BY ACTIVE POSTOPERATIVE REHABILITATION AFTER SPINAL FUSION SURGERY? A RANDOMISED CONTROLLED TRIAL WITH 12-MONTH FOLLOW-UP
Marko Neva, Outi Ilves, Joost Dekker, Liisa Pekkanen, Ilkka Marttinen, Kimmo Vihtonen, Kirsi Piitulainen, Salme Jarvenpaa, Arja Hakkinen
Department of Orthopaedics and Trauma, Tampere University Hospital, Tampere, Finland; Department of Health Sciences, University of Jyväskylä, Jyväskylä, Finland; Department of Physical Medicine and Rehabilitation, Central Finland Health Care District, Jyväskylä, Finland; Department of Rehabilitation Medicine and Department of Psychiatry,

VU University Medical Center, Amsterdam, the Netherlands; Department of Orthopaedics and Trauma, Central Finland Health Care District, Jyväskylä, Finland

- 56** INDIVIDUAL COURSES OF LOW BACK PAIN IN ADULT DANES
- A COHORT STUDY WITH 4- AND 8-YEAR FOLLOW-UPS
Tom Bendix, Lars Korsholm, Lise Hestbaek, Per Kjaer
Rigshospitalet - Glostrup Hospital - University of Copenhagen
- 57** ADDRESSING LUMBAR DEGENERATIVE DISC DISEASE, A PROSPECTIVE 5-YEAR-FOLLOW-UP STUDY WITH AN UNCONSTRAINED TDR
Joel Delecrin, Jacques Beaurain, Jerome Allain, Herve Chataigner, Thierry Dufour, Jean Huppert, Alexandre Poignard, Marc Ameil, Jean-Paul Steib
CHU Hôtel-Dieu,
Service de Chirurgie Orthopédique, 1 place Alexis Ricordeau, Nantes, France
- 58** FINAL RESULTS OF AN INTERNATIONAL MULTICENTER, PROSPECTIVE, OBSERVATIONAL TRIAL ON LUMBAR ARTHROPLASTY FOR SYMPTOMATIC DISC DISEASE
Richard Assaker, Karsten Ritter-Lang, Dominique Vardon, Stephane Litrico, Stephane Fuentes, Michael Putzier, Joerg Franke, Peter Jarzem, Pierre Guigui, Gerard, Jean Charles, Gerard Nakach, Jean Charles Le Huec
CHRU de Lille
- 59** AN 11-YEAR MINIMUM FOLLOW-UP OF THE CHARITE III LUMBAR DISC REPLACEMENT FOR THE TREATMENT OF SYMPTOMATIC DEGENERATIVE DISC DISEASE
Yong Hai, Shibao Lu, Chao Kong
Orthopedic Surgery, Beijing Chaoyang Hospital, Capital Medical University of China
- 60** GLOBAL SAGITTAL ANGLE (GSA): A STEP TOWARD FULL BODY ASSESSMENT FOR SPINAL DEFORMITY
Vincent Challier, Bassel Diebo, Shaleen Vira, Matthew Spiegel, Bradley Harris, Renaud Lafage, Barthelemy Liabaud, Jensen Henry, Frank Schwab, Virginie Lafage
NYU Hospital for Joint Diseases
- 61** DEVELOPMENT OF VALIDATED COMPUTER BASED PREOPERATIVE PREDICTIVE MODEL FOR PROXIMAL JUNCTION FAILURE (PJF) OR CLINICALLY SIGNIFICANT PJK WITH 86% ACCURACY BASED ON 510 ASD PATIENTS WITH 2-YEAR FOLLOW-UP
Christopher Ames, Justin Smith, Frank Schwab, Amit Jain, Tamir Ailon, Eric Klineberg, Justin Scheer
International Spine Study Group
- 62** PROSPECTIVE MULTICENTER ASSESSMENT OF COMPLICATION RATES ASSOCIATED WITH ADULT SPINAL DEFORMITY (ASD) SURGERY IN 291 PATIENTS WITH MINIMUM 2-YEAR FOLLOW-UP
Justin Smith, Eric Klineberg, Frank Schwab, Christopher Shaffrey, Shay Bess, Gregory Mundis, Han Jo Kim, Justin Scheer, Christopher Ames
International Spine Study Group
- 63** DEVELOPMENT OF A PREOPERATIVE PREDICTIVE MODEL FOR INTRA- OR PERI-OPERATIVE MAJOR COMPLICATIONS WITH HIGH ACCURACY VALIDATED WITH 558 ASD PATIENTS
Christopher Ames, Justin Smith, Frank Schwab, Christopher Shaffrey, Gregory Mundis, Tamir Ailon, Eric Klineberg, Justin Scheer
International Spine Study Group

17:30

EUROSPINE GENERAL ASSEMBLY

Plenary Hall - Members only

20:00

OFFICIAL CONGRESS EVENING

(At own expense)

Attire: business/formal

08:30 – 10:00 **Growing Spine**
Plenary Hall

- 64** RISK FACTORS OF SEVERE ADOLESCENT SCOLIOSIS TIED TO HTN
Dingjun Hao, En Xie
Department of Spine Surgery, Hong Hui Hospital, Xi'an Jiaotong University College of Medicine
- 65** THE ASSOCIATION BETWEEN SEVERITY OF SCOLIOSIS AND LUNG CLEARANCE INDEX (LCI) IN PATIENTS WITH ADOLESCENT IDIOPATHIC SCOLIOSIS (AIS)
Anne Katrine Blyme, Birgitte Hanel, Martin Gehrchen, Kim G. Nielsen, Benny Dahl
Rigshospitalet, Copenhagen, Denmark
- 66** PRE-OPERATIVE MRI STUDY ON A CONTINUOUS SERIES OF ADOLESCENT IDIOPATHIC SCOLIOSIS : NEUROAXIAL ABNORMALITIES INCIDENCE AND ITS INFLUENCE ON SURGICAL TREATMENT
Laura Scaramuzzo, Fabrizio Giudici, Marino Archetti, Leone Minoia, Antonino Zagra
I.R.C.C.S. Galeazzi Orthopedic Institute, Milan
- 67** EFFECTS OF FREQUENCY OF DISTRACTION IN MAGNETICALLY-CONTROLLED GROWING ROD LENGTHENING ON OUTCOMES AND COMPLICATIONS
Caglar Yilgor, Kenneth Cheung, Kenny Kwan, Dino Samartzis, Ahmet Alanay, John Ferguson, Colin Nnadi, Ilkka Helenius, Muharrem Yazici, Gokhan Demirkiran, Behrooz Akbarnia
Acibadem University School of Medicine; The University of Hong Kong; Starship Children's Hospital/Auckland Bone and Joint Surgery; Oxford University Hospitals; Turku University Central Hospital, Department of Paediatric Orthopaedic Surgery; Hacettepe University; Orthopaedic Surgery, University of California, San Diego
- 68** OUTCOME OF SCOLIOSIS SURGERY IN SEVERE CEREBRAL PALSY PATIENTS
Tobias Schulte, Klaas Beckmann, Georg Gosheger, Albert Schulze Bövingloh, Matthias Borowski, Ulf Liljenqvist, Viola Bullmann, Tobias Lange
University Hospital Münster, Department of Orthopedics
- 69** COMPARISON OF SEGMENTAL PEDICLE SCREWS VERSUS HYBRID CONSTRUCTS USING SUBLAMINAR WIRES FOR DEFORMITY CORRECTION IN CEREBRAL PALSY
Hossein Mehdian, Luigi Aurelio Nasto, Ana Belen Perez Romera, Oliver Stokes
The Centre for Spinal Studies and Surgery, Queen's Medical Centre University Hospital, Nottingham, NG7 2UH, UK
- 70** WHICH RADIOLOGIC PARAMETERS ARE ASSOCIATED WITH DISC AND FACET DEGENERATION IN THE LUMBAR CURVE AFTER SELECTIVE THORACIC FUSION IN AIS:AN MRI STUDY WITH MINIMUM 10 YEARS FOLLOW UP
Sinan Kahraman, Meric Enercan, Bahadir Gokcen, Levent Ulusoy, Ayhan Mutlu, Tunay Sanli, Erden Erturer, Cagatay Ozturk, Ahmet Alanay, Azmi Hamzaoglu
Istanbul Spine Center
- 71** DEEP PARASPINAL MUSCLES IN IDIOPATHIC SCOLIOSIS: AN ELECTROPHYSIOLOGICAL AND HISTOCHEMICAL STUDY
Martin Krbec, Josef Zámeník, Ivana Stetkarova
Department of Orthopedics and Traumatology, 3rd Faculty of Medicine, Charles University in Prague and Faculty Hospital Královské Vinohrady, Prague, Czech Republic
- 72** VARIANTS OF POC5 GENE IN ADOLESCENT IDIOPATHIC SCOLIOSIS IN FRENCH CANADIAN FAMILIES
Florina Moldovan, Shunmoogum A Patten, Soraya Barchi, Julie Couillard, Patrick Edery, Stefan Parent

CHU Sainte Justine and Faculty of Dentistry University de Montreal, Montreal, Canada; CRCHUM and Department of Neuroscience, Université de Montreal, Montreal; Hospices Civils de Lyon, Lyon, France; Inserm U1028, CNRS UMR5292, University Lyon, France

- 73** BENDING VS FULCRUM VS TRACTION X-RAY UNDER GENERAL ANESTHESIA (TRUGA) FOR EVALUATION OF FLEXIBILITY OF CURVES AND PREDICTION OF CORRECTION IN PATIENTS WITH AIS: WHICH IS BETTER?

*Meric Enercan, Sinan Kahraman, Bahadir Gokcen, Mutlu Cobanoglu, Sinan Yilar, Tunay Sanli, Erden Erturer, Cagatay Ozturk, Ahmet Alanay, Azmi Hamzaoglu
Istanbul Spine Center*

- 74** PLASTICITY OF WEDGE DEFORMITIES OF VERTEBRAL BODIES IN SKELETAL IMMATURE PATIENTS WITH ADOLESCENT IDIOPATHIC SCOLIOSIS WHO TREATED CORRECTIVE SPINAL SURGERY

*Takahiro Makino, Takashi Kaito, Masafumi Kashii, Tsuyoshi Sugiura, Kazuomi Sugamoto, Hideki Yoshikawa
Department of Orthopaedic Surgery, Osaka University Graduate School of Medicine, Osaka, Japan*

10:00-10:30 BREAK

10:30 – 12:00 **The ‘Best of Show’ papers. The highest scored abstract submissions**

The 2015 Best Podium Award will be evaluated out of the seven presentation of this session.

The audience is asked to vote via the EUROSPINE App

Plenary Hall

- 75** GELATINE MATRIX WITH HUMAN THROMBIN DECREASES BLOOD LOSS IN ADOLESCENTS UNDERGOING POSTERIOR SPINAL FUSION FOR IDIOPATHIC SCOLIOSIS. A RANDOMIZED CLINICAL TRIAL

*Ilkka Helenius, Heli Keskinen, Johanna Syvänen, Olli Pajulo
Department of Paediatric Orthopaedic Surgery, Turku University Central Hospital and University of Turku, Finland*

- 76** HEALTH-RELATED QUALITY-OF-LIFE IN ADOLESCENT IDIOPATHIC SCOLIOSIS PATIENTS 25 YEARS AFTER TREATMENT.

*Ane Simony, Steen Bach Christensen, Leah Y Carreon, Mikkel O Andersen
Middelfart Hospital*

- 77** STUDY OF LUMBAR MULTIFIDUS MUSCLES IN PATIENTS WITH CHRONIC LOW BACK PAIN AND IN DEGENERATIVE SCOLIOSIS HUMAN---A BLINDED RANDOMIZED CONTROLLED TRIAL (RCT)

*Dingjun Hao, En Xie
Department of Spine Surgery, Hong Hui Hospital, Xi'an Jiaotong University College of Medicine*

- 78** EFFICACY AND SAFETY OF PROPHYLACTIC LARGE DOSE OF TRANEXAMIC ACID IN ADOLESCENT WITH IDIOPATHIC SCOLIOSIS SURGERY: A PROSPECTIVE, RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED STUDY.

*Dingjun Hao, En Xie
Department of Spine Surgery, Hong Hui Hospital, Xi'an Jiaotong University College of Medicine*

- 79** TLIF VERSUS INSTRUMENTED POSTEROLATERAL FUSION (PLF). A 5-10 YEARS FOLLOW UP - LONG TERM RESULTS FROM AN RCT.

*Kristian Høy, Kamilla Truong, Thomas Andersen, Cody Bünger
Aarhus University Hospital*

- 80** GUIDELINES FOR NON-SURGICAL AND SURGICAL MANAGEMENT OF OSTEOPOROTIC VERTEBRAL BODY FRACTURES
*Thomas Roger Blattert, Klaus John Schnake, Oliver Gonschorek, and the Working Group Osteoporotic Fractures of the German Trauma Society
Schwarzach Orthopedic Clinic; Schön Klinik Nürnberg Fürth; BGU Murnau*
- 81** SELECTIVE APPLICATION OF INTRAWOUND VANCOMYCIN POWDER WITH USE OF FIBLIN GLUE AND/OR INTRAVENOUS DAPTMYCIN FOR OPEN POSTERIOR THORACIC/LUMBAR ARTHRODESIS
*Kotaro Satake, Tokumi Kanemura, Hidetoshi Yamaguchi, Naoki Segi
Konan Kosei Hospital*
- 82** TWO-LEVEL CERVICAL DISC ARTHROPLASTY VS. ACDF: A PROSPECTIVE, RANDOMIZED, CONTROLLED MULTICENTER CLINICAL TRIAL WITH 5-YEAR RESULTS
*Matthew F Gornet, Todd Lanman, Jeffrey McConnell, J Kenneth Burkus, Randall Dryer, Scott Hodges
The Orthopedic Center of St. Louis*

11:35

Kenote Lecture:

Why still pain despite technically perfect spine surgery?

Gunilla Brodda Jansen, MD, PhD, Rehab Medicine/Pain Management, Karolinska Institute, Stockholm; Helena Brisby, MD, PhD, Orthopaedic Surgery, University of Gothenburg; Björn Rydevik, MD, PhD, Orthopaedic Surgery, University of Gothenburg

11:55

Announcement of the Best Podium Award

Margareta Nordin, Phil J Sell

12:00-14:00 EUROSPINE LUNCH SYMPOSIA, Friday

12:00

EUROSPINE LUNCH SYMPOSIUM 5

Adjacent Segment Disease – Facts and Myths

Chair: Klaus J. Schnake, Fürth, Germany

12:15

Facts about adjacent segment disease (ASD)

Dominique Rothenfluh, Oxford, UK

12:35

Discussion

12:40

Is TDR/dynamic stabilization the answer to ASD?

Jean Charles LeHuec, Bordeaux, France

13:00

Discussion

13:05

Can a balanced spine develop ASD?

Claudio Lamartina, Milan, Italy

13:25

Discussion

13:30

How to avoid ASD in the cervical spine

Ralph Kothe, Hamburg, Germany

13:50

Discussion

12:00

EUROSPINE LUNCH SYMPOSIUM 6

The raise and fall of new technologies

14:00 – 15:20 **CONCURRENT SESSIONS**
(QUICK FIRES - SHORT COMMUNICATIONS)

14:00	Basic Science Room Chairs: Karin Würtz-Kozak, Zurich, Switzerland; Cornelia Neidlinger-Wilke, Ulm, Germany
-------	---

- QF1** MODELLING THE FAILURE MECHANISM OF THE ANNULUS FIBROSUS
Marlène Mengoni, Alison Jones, Nagitha Wijayathunga, Ruth Wilcox
institute of Medical and Biological Engineering - University of Leeds, Leeds, UK
- QF2** TOTAL DISC REPLACEMENT USING TISSUE-ENGINEERED INTERVERTEBRAL DISCS IN A CANINE MODEL
Yu Moriguchi, Jorge Mojica Santiago, Peter Grunert, Rodrigo Navarro, Thamina Khair, Lawrence Bonassar, Roger Härtl
Weill Cornell Medical College, New York, USA
- QF3** DECREASED SCIATIC NERVE MOVEMENT IN PEOPLE WITH POSTOPERATIVE RESIDUAL LEG SYMPTOMS FOLLOWING DISCECTOMY FOR LUMBAR INTERVERTEBRAL DISC DISORDER
Gary Shum, Sally Cinnamond, Andrew Clarke, Daniel Chan, Mike Hutton, Rohan Chauhan, Jon Marsden
Plymouth University, Plymouth, UK
- QF4** IS THERE ANY CORRELATION BETWEEN PATHOLOGICAL PROFILE OF FACET JOINTS AND CLINICAL FEATURE IN PATIENTS WITH THORACOLUMBAR KYPHOSIS SECONDARY TO ANKYLOSING SPONDYLITIS? AN IMMUNOHISTOCHEMICAL INVESTIGATION
Bangping Qian, Mingliang Ji, Jun Hu, Yong Qiu, Saihu Mao
Spine Surgery, the Affiliated Drum Tower Hospital of Nanjing University Medical School, Nanjing, China
- QF5** STUDY OF NEURAL CONNECTIVITY USING DTI-TRACTOGRAPHY OF THE THE SENSORIMOTOR NETWORK IN IDIOPATHIC SCOLIOSIS
Julio Domenech, Angel Alberich-Bayarri, Luis Martí-Bonmatí, Gracián Garcia-Martí, María De la Iglesia-Vayá, Jose María Tormos, Álvaro Pascual-Leone
Hospital Arnau de Vilanova. University Cardenal Herrera CEU. Valencia, Spain
- QF6** INVESTIGATION ON THE PROGNOSTIC VALUE OF BIOCHEMICAL MARKERS IN THE CEREBROSPINAL FLUID FOR THE FUNCTIONAL OUTCOME OF THE SPINAL CORD INJURED PATIENTS
Laura Calzà, Mercedes Fernandez, Rita Capirossi, Roberto Montevecchi, Nozha Borjini, Jacopo Bonavita, Tiziana Giovannini, Gian Piero Belloni, Salvatore Ferro, Giovanni Gordini
Health Sciences and Technologies – Interdepartmental Center for Industrial Research, University of Bologna; Bologna Local Health Authority - Intensive Care Unit , EMS and Trauma Centre, Maggiore Hospital, Bologna; Montecatone Rehabilitation Institute SpA, Imola; Emilia-Romagna Region Health Authority - Department of Hospital Services, Bologna, Italy
- QF7** THE MECHANISM OF LIGAMENTUM FLAVUM HYPERTROPHY: INTRODUCING ANGIOGENESIS AS A CRITICAL LINK THAT COUPLES MECHANICAL STRESS AND HYPERTROPHY
Hong Joo Moon, Junseok Hur, Joochan Kim, Youn-Kwan Park
Korea University Guro Hospital, Seoul, Korea
- QF8** LEVEL-SPECIFIC DIFFERENCES IN MIGRATION OF INSTANTANEOUS CENTRES OF ROTATION (ICR) OF LUMBAR INTERVERTEBRAL JOINTS DURING LIFTING
Ameet Aiyangar, Liying Zheng, William Anderst, Bernhard Weisse, Xudong Zhang

1) EMPA, Swiss Federal Laboratories for Materials Science and Technology, Dübendorf, Switzerland; 2) University of Pittsburgh, Pittsburgh, PA, USA

QF9 AUGMENTATION OF PEDICLE SCREWS WITH A SELF-CURING ELASTOMERIC MATERIAL
Werner Schmoelz, Alexander Keiler, Marko Konschake, Nicola Marotta, Alessandro Gasbarrini
Medical University Innsbruck, Austria

QF10 DOES THE TIMING OF CEMENT APPLICATION AND REPOSITION EFFECT PEDICLE SCREW ANCHORAGE?
Luis Alvarez, Christian Hainrich, Werner Schmoelz, Felix Tome, Angel R Piñera, Marta Martin-Fernandez, Javier M Duart
Fundación Jimenez Diaz, Madrid, Spain

14:00	Cervical Spine Room
--------------	-------------------------------

QF11 NOVEL CERVICAL ANGULAR MEASURES ACCOUNT FOR BOTH UPPER CERVICAL COMPENSATION AND SAGITTAL ALIGNMENT
Christopher Ames, Themistocles Protopsaltis, Renaud Lafage, Daniel Sciubba, Robert Hart, Justin Smith, Christopher Shaffrey, Frank Schwab
International Spine Study Group

QF12 CERVICAL SPINE BALANCE IN SCHEUERMANN DISEASE
Piotr Janusz, Marcin Tyrakowski, Tomasz Kotwicki, Kris Siemionow
1 Department of Orthopaedic Surgery University of Illinois at Chicago, Chicago, IL, 2 Department of Orthopedics, Pediatric Orthopedics and Traumatology, The Centre of Postgraduate Medical Education in Warsaw, Poland and 3Spine Disorders Unit, Department of Pediatric Orthopaedics and Traumatology, University of Medical Sciences, Poznan, Poland

QF13 REGIONAL THORACIC AND LUMBAR SAGITTAL COBB ANGLE CHANGES AND UIV DETERMINE EVOLUTION OF CERVICAL ALIGNMENT AFTER ASD SURGERY: SERIES OF 171 PATIENTS WITH 2 YEAR FOLLOW UP
Christopher Ames, Amit Jain, Daniel Sciubba, Han Jo Kim, D.Kojo Hamilton, Justin Scheer, Brian Neuman
International Spine Study Group

QF14 KYPHOPLASTY C2: INDICATIONS AND SURGICAL TECHNIQUE
Ahmed Shawky, Ali Ezzati
Helios Klinikum Erfurt - Germany; Assiut University Hospitals, Egypt

QF15 ALLOGRAFT VERSUS AUTOGRAFT FOR POSTERIOR ATLANTOAXIAL FUSION WITH SCREW-ROD SYSTEM: A PROSPECTIVE COMPARATIVE STUDY
Da-Geng Huang, Xin-Liang Zhang, Xiao-Dong Wang, Ding-Jun Hao, Bao-Rong He, Tuan-Jiang Liu, Qi-Ning Wu, Hua Guo
Department of Spine Surgery, Honghui Hospital, Xi'an Jiaotong University Health Science Center, Xi'an, China

QF16 CLINICAL APPLICATION OF C1 PEDICLE SCREW AND LATERAL MASS SCREW FOR ATLANTOAXIAL INSTABILITY PATIENTS WITH A NORMAL C1 POSTERIOR ARCH: A PROSPECTIVE, DOUBLE-BLIND, RANDOMIZED CONTROLLED TRIAL
Liang Yan, Baorong He, Dingjun Hao
Hong Hui Hospital, Xi'an Jiaotong University College of Medicine, Xi'an, China

QF17 SAFETY AND ACCURACY OF CT-REGION MATCHING NAVIGATED PEDICLE SCREW INSTRUMENTATION OF THE SUBAXIAL CERVICAL AND CERVICOTHORACIC SPINE
Yu-Mi Ryang, Niels Buchmann, Jens Lehmborg, Jens Gempt, Bernhard Meyer
Department of Neurosurgery, Klinikum rechts der Isar, Technical University Munich, Germany

QF18 SURGICAL TREATMENT OF LOWER CERVICAL FRACTURE-DISLOCATIONS WITH SPINAL CORD INJURIES BY ANTERIOR APPROACH. FIVE-TO 15-YEARS FOLLOW-UP
Hua Guo, Biao Wang
Honghui Hospital, Xi'an Jiaotong University College of Medicine, Xi'an, China

QF19 TITANIUM ION LEVELS IN PATIENTS WITH METAL-ON-METAL CERVICAL DISC ARTHROPLASTY: A PROSPECTIVE STUDY UP TO 84 MONTHS
Matthew F Gornet, Vaneet Singh, Francine W Schranck, Anastasia K Skipor, JJ Jacobs
The Orthopedic Center of St. Louis - Spine Research Center, St. Louis, USA

- QF20** QUALITY OF LIFE AFTER CERVICAL DISC ARTHROPLASTY TO TREAT DEGENERATIVE DISC DISEASE: TWO YEAR RESULTS OF AN INTERNATIONAL PROSPECTIVE, MULTICENTER, OBSERVATIONAL STUDY(NTC00875810)
Saleh Baeesa, Ronai Marton, Jan Stulik
Faculty of Medicine King Abdulaziz University, Jeddah, Saudi Arabia
- QF21** BRYAN DISC ARTHROPLASTY VERSUS ANTERIOR CERVICAL DISCECTOMY AND FUSION FOR THE TREATMENT OF CERVICAL DISC DISEASE. A REVIEW OF LEVEL I-II RANDOMIZED CLINICAL TRIALS INCLUDING CLINICAL OUTCOMES.
Eduardo Hevia, María Aragonés, Alberto Caballero, Carlos Barrios
Spine Surgery Unit, Hospital La Fraternidad-Muprespa, Madrid, Spain; Institute for Research on Musculoskeletal Disorders, Valencia Catholic University, Valencia, Spain
- QF22** DOES PREOPERATIVE DISC HEIGHT AFFECT POSTOPERATIVE MOTION AFTER CERVICAL TOTAL DISC REPLACEMENT? ANALYSIS OF PROSPECTIVE CLINICAL TRIAL WITH 2-YEAR FOLLOW-UP
Avinash Patwardhan, Gerard Carandang, Leonard Voronov, Robert Havey, Carl Laurysen, Domagoj Coric, Thomas Dimmig, David Musante
Loyola University Chicago, Chicago, Illinois, USA; Edward Hines Jr. VA Hospital, Niles, Illinois, USA
- QF23** CHARACTERISTICS OF PICA END VERTEBRAL ARTERY: AS ANATOMICAL VARIATION, AND POTENTIAL RISK FOR CERVICAL SPINE SURGERY
Takeshi Aoyama, Naoshi Obara
Spine Center, Department of Orthopaedic Surgery, Teine Keijinkai Hospital, Sapporo, Japan
- QF24** COMPARISON OF CAGE WITH LOCAL BONE GRAFT AND ILIAC BONE GRAFT IN ANTERIOR CERVICAL DISCECTOMY AND FUSION(ACDF): A PROSPECTIVE STUDY
Zhili Liu, Xu Xiong, Jiaming Liu
Department of Orthopedics Surgery, the First Affiliated Hospital of Nanchang University, Nanchang, 330006, China
- QF25** THE DURATION OF SYMPTOMS AND CLINICAL OUTCOMES IN PATIENTS UNDERGOING ANTERIOR CERVICAL DISCECTOMY AND FUSION FOR DEGENERATIVE DISC DISEASE AND RADICULOPATHY
Alan Villavicencio, Sigita Burneikiene, Lee Nelson, Alexander Mason, Sharad Rajpal
Boulder Neurosurgical Associates, Justin Parker Neurologic Institute, Boulder, CO, USA

14:00

**Thoraco-Lumbar Spine, degenerative
Room**

- QF26** SHORT FORM OF THE DISTRESS AND RISK ASSESSMENT METHOD: DEVELOPMENT AND VALIDATION
Aron Lazary, Julia Szita, Zsolt Szövérfi, Peter Pal Varga
National Center for Spinal Disorders, Budapest, Hungary
- QF27** DOES THE ADDITION OF CLONIDINE TO LUMBAR NERVE ROOT BLOCKS IMPROVE OUTCOME. A RANDOMISED, PROSPECTIVE, SINGLE BLINDED CONTROLLED PILOT STUDY
Patrick Hourigan, Helen Challinor, Sarah Whitehouse, Andrew Clarke
Royal Devon and Exeter Hospital, Exeter, UK
- QF28** PREOPERATIVE FIBRINOGEN PLASMA CONCENTRATION BUT NOT FACTOR XIII ACTIVITY PREDICTS BLEEDING IN LUMBAR SPINAL FUSION PATIENTS
Malin Carling, Anders Jeppsson, Bengt Eriksson, Helena Brisby
Dept. of orthopaedics, Institute of clinical sciences, Sahlgrenska Academy, University of Gothenburg, Sweden
- QF29** TIMING OF TREATMENT OF CAUDA EQUINA SYNDROME AT A NATIONAL TREATMENT CENTRE
Daryl Blades, Gavin Heyes, Katie Jess, niall eames
Royal Victoria Hospital Belfast, UK
- QF30** TWO YEAR OUTCOMES OF PROSPECTIVE RANDOMIZED TRIAL COMPARING LUMBAR DECOMPRESSION WITH OR WITHOUT INTERLAMINAR STABILIZATION
Michael Rauschmann, Matteo Bonsanto, Joerg Franke, Steffen Sola
Department of spine surgery, Frankfurt, Germany
- QF31** PREDISPOSING FACTORS FOR INTRAOPERATIVE ENDPLATE INJURY OF MINIMALLY INVASIVE LATERAL INTERBODY FUSION
Kotaro Satake, Tokumi Kanemura, Hidetoshi Yamaguchi, Naoki Segi

- QF32** *Konan Kosei Hospital, Konan, Japan*
 RECIPROCAL CHANGES ASSESSMENT IN ADJACENT MOBILE LEVEL FOLLOWING MONOSEGMETAR INTERBODY FUSION
Enrique Vargas, Rodrigo Amaral, Luis Marchi, Leonardo Oliveira, Fernanda Fortti, Etevaldo Coutinho
Instituto de Patologia da Coluna, São Paulo, Brazil
- QF33**
 RHBMP-2-INDUCED RADICULITIS IN TRANSFORAMINAL LUMBAR FUSION PATIENTS: RELATIONSHIP TO DOSE
Alan Villavicencio, Sigita Burneikiene
Boulder Neurosurgical Associates, Justin Parker Neurologic Institute, Boulder, CO, USA
- QF34**
 AN OBSERVATIONAL STUDY ON THE OUTCOME AFTER SURGERY FOR LUMBAR DISC HERNIATION IN ADOLESCENTS COMPARED TO ADULTS BASED ON THE SWEDISH SPINE REGISTER.
Tobias Lagerbäck, Peter Elkan, Hans Möller, Anna Grauers, Elias Diarbakerli, Paul Gerdhem
Karolinska Institutet and Karolinska University Hospital, Stockholm, Sweden
- QF35**
 CLASSIFICATION OF THE SAGITTAL PLANE BY INTEGRATING ALIGNMENT, BALANCE AND COMPENSATION
Dominique A Rothenfluh, Jeremy Reynolds, Dennis Dominguez
Oxford University Hospitals NHS Trust, University of Oxford, United Kingdom
- QF36**
 THE RELATIONSHIPS BETWEEN THE SRS-SCHWAB CLASSIFICATION MODIFIERS AND THE ODI SCORE ARE ROBUST TO CONFOUNDING
Dennis Hallager Nielsen, Lars Valentin Hansen, Casper Rokkjær Dragsted, Nina Caroline Peytz, Martin Gerhchen, Benny Dahl
Spine Unit, Department of Orthopaedic Surgery, Rigshospitalet, University of Copenhagen, Copenhagen, Denmark
- QF37**
 SPINAL FUSION TERMINATING AT L5 IN ADULT SCOLIOSIS: FACTORS ASSOCIATED WITH SUBSEQUENT EXTENSION OF THE FUSION TO THE SACRUM
Santo Creaco, Anne F Mannion, Dezsö Jeszenszky, Frank S Kleinstück, Daniel Haschtmann, Tamas F Fekete
Spine Center, Schulthess Klinik, Zürich, Switzerland
School of Specialization in Orthopedic and Traumatology Surgery – University of Messina – Messina, Italy
- QF38**
 RISK FACTORS ASSOCIATED WITH ROD FRACTURE AFTER OSTEOTOMY FOR ADULT SPINAL DEFORMITY
Evalina Burger, Cameron Barton, Andriy Noshchenko, Vikas Patel, Christopher Cain, Christopher Kleck
University of Colorado, Anschutz Medical Campus, Aurora, USA
- QF39**
 PROSPECTIVE MULTICENTER ASSESSMENT OF INTRAOPERATIVE AND PERIOPERATIVE COMPLICATION RATES ASSOCIATED WITH ADULT SPINAL DEFORMITY (ASD) SURGERY IN 558 PATIENTS
Justin Smith, Eric Klineberg, Frank Schwab, Christopher Shaffrey, Shay Bess, Gregory Mundis, Han Jo Kim, Justin Scheer, Christopher Ames
International Spine Study Group
- QF40**
 EFFECT OF TREATMENT COMPLICATIONS ON THE OUTCOMES IN ADULT SPINAL DEFORMITY (ASD): A DECISION ANALYSIS (DA) APPROACH
Emre Acaroglu, Umit Ozgur Guler, Aysun Cetinyurek-Yavuz, Selcen Pehlivan, Yasemin Yavuz, Montse Domingo-Sabat, Ferran Pellise, Ahmet Alanay, Francesco Sanchez Perez Grueso, Frank Kleinstück, Ibrahim Obeid, ESSG
1) Ankara Spine Center, Ankara TR; 2) Clinistats EU, Zurich, CH; 3) Hospital Universitari Vall d'Hebron, Barcelona, E; 4) Acibadem Maslak Hospital, Istanbul, TR; 5) Hospital Universitari La Paz, Madrid, E; 6) Schultess Clinic, Zurich, CH; 7) Bordeaux University Hospital, Bordeaux, France

14:00

Growing Spine

Room

QF41

PROVIDENCE NIGHTTIME BRACING, IN TREATMENT OF ADOLESCENT IDIOPATHIC SCOLIOSIS.

Ane Simony, Inge Beuschau, Lena Quisth, Mikkel O Andersen
Middelfart Hospital, Middelfart, Denmark

- QF42** THE PREVALENCE OF INTRASPINAL ANOMALIES IN INFANTILE AND JUVENILE PATIENTS WITH PRESUMED IDIOPATHIC SCOLIOSIS: A MRI-BASED ANALYSIS OF 504 PATIENTS
Zezhang Zhu, Wen Zhang, Zhen Liu, Xu Sun, Yong Qiu
Spine Surgery, the Affiliated Drum Tower Hospital of Nanjing University Medical School, Nanjing, China
- QF43** DOES PEDICLE SCREW FIXATION UNDER AGE FIVE CAUSE SPINAL CANAL NARROWING? A CT STUDY WITH MINIMUM 5 YEARS FOLLOW-UP
Sinan Kahraman, Meric Enercan, Mutlu Cobanoglu, Levent Ulusoy, Ayhan Mutlu, Tunay Sanli, Bahadir Gokcen, Erden Erturer, Cagatay Ozturk, Azmi Hamzaoglu
Istanbul Spine Center, Turkey
- QF44** A SIMPLE METHOD FOR ASSESSING ROTATIONAL FLEXIBILITY IN ADOLESCENT IDIOPATHIC SCOLIOSIS: MODIFIED ADAM'S FORWARD BENDING TEST
Alpaslan Senkoylu, Mustafa Ilhan, Necdet Altun, Dino Samartzis, Keith Luk
Gazi University, Orthopaedics and Traumatology, Ankara, Turkey
- QF45** SLIDING-GROWING ROD TECHNIQUE (SGRT) IN THE TREATMENT OF EARLY ONSET SCOLIOSIS – MORE THAN 2 YEARS OF FOLLOW-UP
Meriç Enercan, Sinan Kahraman, Bahadır Gökçen, Tunay Sanlı, Sinan Yılar, Erden Erturer, Cagatay Ozturk, Azmi Hamzaoglu
Istanbul Spine Center, istanbul, Turkey
- QF46** MAGNETICALLY CONTROLLED EXTENSION DEVICES: DOES IT REALLY DO EXACTLY WHAT IT SAYS?
Daniel Winson, Kar Teoh, Narendra Rath, Sashin Ahuja
University Hospital of Wales
- QF47** THE EFFECT OF MAGNETICALLY CONTROLLED GROWING ROD ON THE SAGITTAL PROFILE IN EARLY-ONSET SCOLIOSIS PATIENTS
Caglar Yilgor, Kenneth Cheung, Kenny Kwan, Dino Samartzis, John Ferguson, Colin Nnadi, Ilkka Helenius, Muharrem Yazici, Gokhan Demirkiran, Ahmet Alanay, Behrooz Akbarnia
Acibadem University School of Medicine; The University of Hong Kong, Starship Children's Hospital/Auckland Bone and Joint Surgery; Oxford University Hospitals; Turku University Central Hospital, Department of Paediatric Orthopaedic Surgery; Hacettepe Universit; Orthopaedic Surgery, University of California, San Diego
- QF48** ASYMMETRIC APPEARANCE IN THE OSSIFICATION CENTER OF RING APOPHYSIS IN PATIENTS WITH ADOLESCENT IDIOPATHIC SCOLIOSIS (LENKE TYPE 1)
Takahiro Makino, Takashi Kaito, Tsuyoshi Sugiura, Masafumi Kashii, Hideki Yoshikawa
Department of Orthopaedic Surgery, Osaka University Graduate School of Medicine, Osaka, Japan
- QF49** SERIAL ELONGATION, DEROTATION AND FLEXION (EDF) CASTING UNDER GENERAL ANESTHESIA AND NEURO-MUSCULAR BLOCKING DRUGS IMPROVE OUTCOME IN PATIENTS WITH JUVENILE SCOLIOSIS: PRELIMINARY RESULTS
Federico CANAVESE
University Hospital Estaing, Dept. of Pediatric Surgery, Clermont Ferrand, France

14:00

**Trauma, Tumor
Room**

- QF51** AGE-RELATED CHANGES IN THORACIC SPINE KINEMATICS
Dominika Ignasiak, Andrea R ueger, Stephen J. Ferguson
Institute for Biomechanics, ETH Zurich, Switzerland
- QF52** DIFFUSION-WEIGHTED MRI ASSESSMENT OF ADJACENT DISC DEGENERATION AFTER THORACOLUMBAR VERTEBRAL FRACTURES
David Noriega, Francisco Ardura, Ruben Hernandez Ramajo
University of Valladolid, Spain
- QF53** CLINICAL OUTCOMES OF INTRAOPERATIVE CONE-BEAM CT NAVIGATION FOR PEDICLE SCREW INSTRUMENTATION IN EMERGENT SPINE SURGERY
John Street, Daniel Mendelsohn, Jason Strelzow, Juliet Batke, Nicolas Dea
University of British Columbia, Vancouver, Canada
- QF54** RADIOLOGICAL AND CLINICAL RESULTS AFTER IMPLANTATION OF A HYDRAULIC EXPANSIBLE VERTEBRAL BODY REPLACEMENT FOLLOWING TRAUMATIC VERTEBRAL FRACTURES IN THE THORAKO-LUMBAR SPINE - A THREE-YEARS-FOLLOW-UP
Michael Kreinest, Dorothee Schmahl, Paul A. Gr utzner, Stefan Matschke

BG Trauma Center Ludwigshafen, Department of Trauma and Orthopedic Surgery, Ludwigshafen, Germany

- QF55** SPINAL TRAUMA IN PATIENTS WITH ANKYLOSING SPINAL DISORDERS - A MULTICENTER STUDY, NAGOYA SPINE GROUP -
Mikito Tsushima, Shiro Imagama, Zenya Ito, Kei Ando
Nagoya University Graduate School of Medicine, Department of Orthopedic Surgery, Nagoya, Japan
- QF56** PREDICTING HIGH SURGICAL TREATMENT COSTS AT PRIMARY SPINAL TUMOR PATIENTS
Zsolt Szövérfi, Aron Lazary, Izabella Kószó, Kornél Papik, Péter Pál Varga
National Center for Spinal Disorders, Budapest, Hungary
- QF57** EVALUATION OF SCORING SYSTEM AND PROGNOSTIC FACTORS IN PATIENTS WITH SPINAL METASTASES FROM LUNG CANCER
Kimberly-Anne Tan, Jonathan JH Tan, Sandar Zaw Aye, Naresh Kumar
National University Hospital, Department of Orthopaedics, Singapore
- QF58** A MODIFICATION OF THE TOKUHASHI REVISED SCORE IMPROVES PROGNOSTIC ABILITY IN PATIENTS WITH METASTATIC SPINAL CORD COMPRESSION.
Søren Schmidt Morgen, Martin Gehrchen, Sebastian Bjørck, Claus Falck Larsen, Svend Aage Engelholm, Benny Dahl
1) Spine Unit, Department of Orthopedic Surgery, Copenhagen University Hospital, Rigshospitalet; 2) Trauma Center, Copenhagen University Hospital, Rigshospitalet; 3) Department of Radiation and Oncology, Copenhagen University Hospital, Rigshospitalet, Copenhagen, Denmark
- QF59** METASTATIC SPINE TUMOUR SURGERY: MINIMALLY INVASIVE APPROACH VERSUS OPEN APPROACH
Naresh Kumar, Pang Hung Wu, Aye Sandar Zaw, Rishi Malhotra
National University Health System, Singapore
- QF60** POSTERIOR THORACIC CORPECTOMIES WITH CAGE RECONSTRUCTION FOR METASTATIC SPINAL TUMORS: COMPARING THE MINI-OPEN APPROACH TO THE OPEN APPROACH
Dean Chou, Darryl Lau
Department of Neurological Surgery, University of California San Francisco

14:00

**New Techniques, Imaging, Patient Safety, Infection, Complications
Room**

- QF61** DEGENERATIVE CHANGES IN T1RHO MRI OF THE LUMBAR SPINE IN ASYMPTOMATIC SUBJECTS
Tobias Schulte, Volker Vieth, Georg Gosheger, Christoph Stehling, Walter Heindel, Joachim Gerß, Tobias Lange, Raphael GÜbitz
Department of Orthopedics and Tumor Orthopedics, University Hospital Münster, Germany; Department of Clinical Radiology, University Hospital Münster, Germany; Institute of Biostatistics and Clinical Research, University of Münster, Germany; Fraunhofer MEVIS, Institute for Medical Image Computing, Bremen
- QF62** SANDWICH VERTEBRAL FRACTURE IN THE STUDY OF ADJACENT-LEVEL FRACTURE AFTER CEMENTED VERTEBRAL AUGMENTATION
Félix Tomé-Bermejo, Angel R Piñera, Javier Melchor Duart Clemente, Silvia Pérez-Esteban, Luis Alvarez
Spine Department. Fundación Jiménez Díaz University Hospital, Madrid, Spain
- QF63** NEW SURGICAL APPROACH AND DECOMPRESSION PRESERVING MUSCLE-LIGAMENOUS COMPLEX FOR LUMBAR CANAL STENOSIS
Futoshi Suetsuna
Hachinohe Municipal Hospital, Hachinohe, Japan
- QF64** OCCULT INFECTIONS IN PATIENTS UNDERGOING REVISION SURGERY.
Celeste Abjornson, Tucker Callanan, Victor Yoon, Frank Cammisa
Hospital for Special Surgery, New York, USA
- QF65** AN ALGORITHMIC APPROACH FOR MANAGING ORTHOPAEDIC SURGICAL WOUNDS OF THE CICATRICIAL SCLIOSIS: NEW TECHNOLOGIES
En Xie, Dingjun Hao

Department of Spine Surgery, Hong Hui Hospital, Xi'an Jiaotong University College of Medicine, Xi'an, China

- QF66** IS PREOPERATIVE FIBRINOGEN PLASMA CONCENTRATION A GOOD BLEEDING PREDICTOR IN ADULT SPINAL DEFORMITY SURGERY?
Lidia Mora, Alba Vila-Casademunt, Ferran Pellisé, M José Colomina, Montse Domingo-Sàbat, Francisco Javier S Pérez-Grueso, Ahmet Alanay, Emre Acaroglu, Joan Bagó, ESSG European Spine Study Group
Hospital Vall Hebron, Barcelona; Vall Hebron Institut de Recerca, Barcelona; Hospital De La Paz, Madrid; Acibadem University School of Medicine, Istanbul; Ankara Spine Center, Ankara, Turkey
- QF67** THE EFFECT OF LUMBAR DISC DEGENERATION ON POSITIONAL CHANGES IN THE LUMBAR LORDOSIS: A CROSS-SECTIONAL COMPARISON WITH HEALTHY CONTROLS
Bjarke Brandt Hansen, Tom Bendix, Jacob Juel Grindsted, Henning Bliddal, Robin Christensen, Philip Hansen, Robert CG Riis, Mikael Boesen
The Parker Institute, Department of Rheumatology, Copenhagen University Hospital, Frederiksberg, Denmark
- QF68** THE ACCURACY OF THORACIC PEDICLE SCREW PLACEMENT IN SPINAL DEFORMITIES WITH THE USE OF SPECIFIC RAPID PROTOTYPING 3D TEMPLATES
Janez Mohar, Robert J. Cirman
Department of Spine Surgery and Paediatric Orthopaedics, Valdoltra Orthopaedic Hospital, Ankaran, Slovenia
- QF69** PROXIMAL JUNCTIONAL FAILURE WITH NEUROLOGICAL DEFICIT FROM A RETROSPECTIVE DATABASE
Charles Sansur, Andrew Frost, Niall Craig, John Schmidt, Jennifer McCool, Megan Dumas
University of Maryland Medical Center, NHS Grampian, Leesburg, USA
- QF70** INCIDENCE OF CANCER AND INFERTILITY, IN PATIENTS TREATED FOR ADOLESCENT IDIOPATHIC SCOLIOSIS 25 YEARS PRIOR
Ane Simony, Steen Bach Christensen, Karl Erik Jensen, Leah Y Carreon, Mikkel O Andersen
Middelfart Hospital, Middelfart, Denmark
- QF71** INCIDENTAL DUROTOMY: HOW TO INCREASE THE RATE OF SUCCESSFUL SINGLE STAGE CLOSURE
Luca Papavero, Nils Engler
Clinic for Spine Surgery; Schoen Klinik Hamburg Eilbek, Germany
- QF72** RELATIONSHIP BETWEEN PSOAS MUSCLE POSITION AND SPINO-PELVIC ALIGNMENT: AN ANATOMICAL ANALYSIS USING MRI FOR LATERAL INTERBODY FUSION SURGERY
Akira Kondo 1,2, Yuichiro Abe 1, Kentaro Yamada 1, Takano Otsuka 2, Shigenobu Sato 1
1. Dept. of Orthopedics Surg. Eniwa Hospital, 2. Dept. of Orthopedics Surg. Nagoya City University, Japan
- QF73** CAN A FORMULA REALLY PREDICT THE THEORETICAL LUMBAR LORDOSIS RELIABILITY THROUGH A RADIOGRAPHIC STUDY IN 296 HEALTHY VOLUNTEERS
Féthi Laouissat, Pierre Roussouly
CMCR Massues-Croix Rouge Française, Lyon, France
- QF74** COMPUTER-ASSISTED SPINOPELVIC TUMOR RESECTION USING ULTRASONIC OSTEOTOME INTEGRATED STEREOTACTIC NAVIGATION
Justin Bird, Patrick Lin, Robert Satcher, Bryan Moon, Valerae Lewis
MD Anderson Cancer Center, Houston, USA
- QF75** INCIDENCE AND RISK FACTORS FOR VENOUS THROMBOEMBOLISM AFTER SPINE SURGERY: A PROSPECTIVE COHORT STUDY
Katsuhito Yoshioka, Hideki Murakami, Satoru Demura, Satoshi Kato, Moriyuki Fujii, Takashi Igarashi, Noritaka Yonezawa, Hiroyuki Tsuchiya
Department of Orthopaedic Surgery, Kanazawa University, Kanazawa, Japan

15:20-15:50 **BREAK**

15:50 – 17:30 **New Techniques, Imaging, Patient Safety, Infection, Complications**
Plenary Hall

- 83** MULTICENTER, RANDOMIZED PLACEBO-CONTROLLED CLINICAL TRIAL TO EVALUATE THE EFFECT OF PERIOPERATIVE USE OF TRANEXAMIC ACID ON TRANSFUSION REQUIREMENTS AND SURGICAL BLEEDING IN MAJOR SPINE SURGERY
Juan Bago, MJose Colomina, Frederic Font, Javier Pizones, Salvador Fuster, Ferran Pellise
Hospital Vall d'Hebron. Barcelona. Spain
- 84** PATIENT REPORTED VALUE 1 YEAR AFTER SURGERY FOR LUMBAR DISC HERNIATION: PREDICTORS OF OUTCOME USING THE SWEDISH NATIONAL SPINE REGISTER; SWESPINE.
Peter Fritzell, Olle Hägg, Björn Strömqvist, Björn Knutsson
Neuro-orthopedic clinic, Jönköping, Sweden; Spine Center Göteborg, Sweden
Orthopedic clinic, Sundsvalls sjukhus, Sweden; Lund University Hospital, Sweden
- 85** PEDICLE SCREW MALPOSITION IN REVISION SPINE SURGERY: EFFICACY OF INTRA-OPERATIVE CT BASED NAVIGATION
John Street, Harvey Wu, Andrew Pennington, Juliet Batke, Kaiyun Yang, Charles Fisher, Marcel Dvorak
University of British Columbia
- 86** DEVELOPMENT, CHARACTERIZATION, AND IN VITRO ASSESSMENT OF ADDITIVE MANUFACTURED BIOMIMETIC IMPLANT SURFACES
Regina MacBarb, Derek Lindsey, Chelsea Bahney, Shane Woods, Mark Wolfe, Scott Yerby
SI-BONE, Inc.
- 87** GLOBAL TILT: A SINGLE PARAMETER INCORPORATING THE SPINAL AND PELVIC PARAMETERS CORRELATES WITH HEALTH-RELATED QUALITY OF LIFE PARAMETERS
Caglar Yilgor, Meric Enercan, Azmi Hamzaoglu, Ferran Pellise, Paco Sanchez Perez-Gruoso, Emre Acaroglu, Ibrahim Obeid, Frank Kleinstuck, Ahmet Alanay, ESSG
European Spine Study Group
Acibadem University School of Medicine; Istanbul Spine Center; Spine Unit, Hospital Valle Hebron; Hospital De La Paz, Madrid; Orthopedic Spine, Ankara Spine Center; CHU Bordeaux Pellegrin Hospital; Department of Orthopaedics and, Schulthess Klinik; Fundació Institut de Recerca Vall Hebron
- 88** REDUCING ROD BREAKAGE AND NONUNION IN PEDICLE SUBTRACTION OSTEOTOMY: THE IMPORTANCE OF ROD NUMBER AND CONFIGURATION IN 264 PATIENTS WITH 2-YEAR FOLLOW-UP
Virginie Lafage, Munish Gupta, Jensen Henry, Frank Schwab, Christopher Ames, Eric Klineberg, Justin Smith, Christopher Shaffrey, Douglas Burton, International Spine Study Group
International Spine Study Group
- 89** IS THE C7 SAGITTAL VERTICAL AXIS (SVA) THE BEST RADIOGRAPHIC MEASURE TO PREDICT CLINICAL OUTCOMES IN ADULT SPINAL DEFORMITY?
Yong-Chan Kim, Lawrence G. Lenke, Young-Woo Kim, Sirichai Wilartratsami, Cheol-Jung Yang
Department of Orthopaedic Surgery, Hallym University Sacred Heart Hospital, Hallym University School of Medicine
- 90** PREDICTING MEDICAL COMPLICATIONS TO ENHANCE SAFETY OF SPINE SURGERY
Maximilian Kasperek, Josef Grohs
Department of Orthopaedic Surgery, University of Vienna
- 91** INCIDENCE OF COMPLICATIONS AND ADVERSE EVENTS AFTER VIDEO ASSISTED THORACIC SURGERIES (VATS) AT THE SPINAL COLUMN: RESULTS OF A SYSTEMATIC RETROSPECTIVE ANALYSIS OF 282 CASES
Daniel PJ Sauer, Franziska Heider, Raphael D'Agostini, Imme Haubitz, Andreas Korge, Christoph Mehren, Michael Mayer, Christoph Siepe
Schoen Clinic Munich Harlaching
- 92** DIFFUSION TENSOR IMAGING IN CERVICAL SYRINGOMYELIA SECONDARY TO CHIARI I MALFORMATION: PRELIMINARY RESULTS

Huang Yan, Ze Zhang Zhu, zhen Liu, Yong Qiu, bangping qian, Xu Sun
The Spine Surgery, the Affiliated Drum Tower Hospital of Nanjing University Medical School, Nanjing, China

- 93** SURGICAL APPROACH CAN INFLUENCE POSTDECOMPRESSION RELEASE OF TENSION ON THE MYELOPATHIC SPINAL CORD LONG TRACKS: A DYNAMIC CERVICAL MRI 3-D RECONSTRUCTION ANALYSIS
Marin Stancic, Ivana Stancic, Zvonimir Ivan Lubina
Clinical Hospital Center Zagreb, Zagreb, Croatia; TIA, Copenhagen, Denmark; Clinical Hospital Merkur, Zagreb, Croatia
- 94** PATTERNS OF LUMBAR PAIN: A COST ANALYSIS APPROACH TO LUMBAR PAIN IN PRIMARY CARE IN OCCUPATIONAL MEDICINE. A COMPARATIVE STUDY OF TWO RETROSPECTIVE COHORTS OF 2375 PATIENTS DURING 2014 (1)
Jaime Diaz de Atauri(1), Oscar Zabalza Mantilla (2), Mikel Ayala García (2)
(1) Clínica Ercilla Mutualia, Bilbao; (2) Mutualia Alava, Vitoria-Gasteiz, Spain

17:30

ADJOURN – END