Wednesday, 11 October, 2017

08:30 OPENING
Local Hosts: Ciaran Bolger, Frank Dowling, Dublin, Ireland

08:33 WELCOME ADDRESS
Margareta Nordin, EUROSPINE President

08:36 INTRODUCTION TO THE SCIENTIFIC PROGRAMME
The blinded peer review process of the Programme Committee
Stavros Stavridis, Thessaloniki, Greece, Chair Programme Committee 2017

08:40 – 10:00 Epidemiology, Non-operative Treatment, Patient Safety
Room: Plenary Hall
Chairs: Margareta Nordin, Romorantin, France; Stavros Stavridis, Thessaloniki, Greece

1 VALIDITY OF LUMBAR SPINAL STENOSIS OUTCOME MEASURES USED IN CLINICAL STUDIES: A SYSTEMATIC ANALYSIS OF RANDOMIZED AND OBSERVATIONAL CLINICAL TRIALS
Maria M. Wertli, Diego R. L. Rossi, Jakob M. Burgstaller, Eva Rasmussen-Barr, Sherri Weiser, Ulrike Held, Johann Steurer, Florian Brunner
1) Division of General Internal Medicine, Bern University Hospital, University of Bern, Bern, Switzerland; 2) Horten Centre, Zurich University, Zurich, Switzerland; 3) Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden; 4) NYU Langone Medical Center, Occupational and Industrial Orthopaedic Center (OIOC), New York University, New York, NY, USA; 5) Department of Physical Medicine and Rheumatology, Balgrist University Hospital, Zurich, Switzerland

2 THE ADULT DEFORMITY SURGERY COMPLEXITY INDEX (ADSCI): A VALID TOOL TO QUANTIFY THE COMPLEXITY OF POSTERIOR ADULT SPINAL DEFORMITY SURGERY AND PREDICT POSTOPERATIVE COMPLICATIONS
Ferran Pellisé, Alba Vila-Casademunt, Susana Núñez-Pereira, Montse Domingo-Sàbat, Joan Bagó Granell, Xavier Vidal, Ahmet Alanay, Emre Acaroglu, Frank Kleinstück, Ibrahim Obeid; Francisco Javier Perez-Grueso; Virginie Lafage; Shay Bess; Christopher Ames; Anne F. Mannion; ESSG
Vall d’Hebron Hospital, Barcelona, Spain; Vall d’Hebron Institute of Research, Barcelona, Spain; St. Franziskus-Hospital, Köln, Germany; Acibadem University School of Medicine, Istambul, Turkey; Ankara Spine Center, Ankara, Turkey; Schulthess Klinik, Zürich, Switzerland; Bordeaux University Hospital, Bordeaux, France; Hospital Universitario La Paz, Madrid, Spain; Hospital for Special Surgery, New York City, USA; Presbyterian/St. Luke’s Medical Center, Denver, USA; USCF Medical Center, San Francisco, USA
3 PATIENT REPORTED OUTCOMES OF LUMBAR DECOMPRESSION SURGERY: A STUDY OF 2,838 PATIENTS
Sujay Dheerendra, Geraint Sunderland, Robin Pillay
Dept of Neurosurgery, Liverpool, UK

4 WHAT DO PATIENTS WITH SPINE PAIN LEARN FROM PSYCHOLOGICALLY INFORMED PHYSICAL THERAPY?
Sherri Weiser*, Angela Lis*, Tara Brennan*, Gregg Ziemke**, Rudi Hiebert**, Danielle Faulkner**, Brian Iveson***, Danielle Southerst*, Marco Campello*
* Occupational and Industrial Orthopedics Center, New York University Hospital for Joint Diseases, New York, NY; **BADER Consortium, University of Delaware, Newark, DE; ***Department of Physical Therapy, Naval Medical Center Portsmouth, Norfolk VA, USA

5 INCIDENCE OF MATERIAL FAILURE OF DYNAMIC SPINE IMPLANTS. ARE IMPLANT TESTS BEFORE MARKET LAUNCH IN EUROPE SUFFICIENT?
Stavros Oikonomidis, Thomas Kaulhausen, Kourosh Zarghooni, Jan Siewe, Rolf Sobottke
Center of Traumatology and Orthopedics, City Region of Aachen, Germany

6 BRACING FOR ADOLESCENT IDIOPATHIC SCOLIOSIS (AIS) AND SCHEUERMANN KYPHOSIS: THE ISSUE OF OVERTREATMENT IN GREECE
Nikos Karavidas
Schroth Scoliosis & Spine Clinic, Athens, Greece

7 POSTOPERATIVE BACK-SPECIFIC AND AEROBIC TRAINING DOES NOT IMPROVE TRUNK MUSCLE STRENGTH AND IMBALANCE AFTER LUMBAR SPINE FUSION - A RANDOMIZED CONTROLLED TRIAL
Outi Ilves 1, Marko H. Neva 2, Keijo Häkkinen 1, Joost Dekker 3, Salme Järvenpää 4, Kati Kyrölä 5, Arja Häkkinen 6
1) Faculty of Sports and Health Sciences University of Jyväskylä, Finland; 2) Department of Orthopaedics and Trauma Tampere University Hospital, Tampere, Finland; 3) Department of Rehabilitation Medicine and Department of Psychiatry, VU University Medical Center, Amsterdam, the Netherlands; 4) Department of Physical Medicine and Rehabilitation, Central Finland Health Care District, Jyväskylä, Finland; 5) Department of Orthopaedics and Trauma, Central Finland Health Care District, Jyväskylä, Finland; 6) Department of Physical Medicine and Rehabilitation, Central Finland Health Care District; Faculty of Sports and Health Sciences University of Jyväskylä, Finland

8 PROGNOSTIC FACTORS FOR PREGNANCY-RELATED PELVIC GIRDLE PAIN IN FIRST-TIME MOTHERS IN IRELAND
Francesca Wuytack, Deirdre Daly, Elizabeth Curtis, Cecily Begley
Trinity College Dublin, Ireland

10:00-10:30 BREAK

10:30 – 12:00 Debates
Room: Plenary Hall
Introduction: Haluk Berk, Izmir, Turkey

EUROSPINE 2017 Dublin - 2
10:30 **Debate 1: To Screen or Not to Screen for Psychological Distress and Surgical Spine Intervention**
Moderation: Margareta Nordin, Romorantin, France
Surgical Point of View (Against): Emre Acaroglu, Ankara, Turkey
Non-Surgical Point of View (For): Christine Cedraschi, Geneva, Switzerland
Discussion and Recommendations: All

11:15 **Debate 2: Lumbar Disc Herniation: Do We Operate Too Early or Should We Operate Earlier?**
Moderation: Stavros Stavridis, Thessaloniki, Greece
"We operate too early" Tim Pigott; Liverpool, UK
"We should operate earlier" Klaus J Schnake, Fürth, Germany

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**EUROSPINE LUNCH SYMPOSIA, Wednesday**

**EUROSPINE LUNCH SYMPOSIUM 1**
Liffey Hall 2
**What to Do When the Unexpected Happens**
CSRS-Europe Lunch Symposium
Faculty: Carmen Vleggeert-Lankamp, Ronald Bartels, Björn Zoega, the Netherlands
Case Presentations
Discussion with Audience
Short Overview of the Literature

**EUROSPINE LUNCH SYMPOSIUM 2**
Wicklow Hall 1
**Optimizing Value and Outcomes in Spine Care Through Psychologically-informed Practice**
Chairs: Greg Whitcomb, Sherri Weiser
Objective: Introduce and overview of the concept of PiP including theoretical background, empirical support and relevance to the current practice of spine care in the rapidly changing health care environment

12:15 Introduction
*Sherri Weiser*, New York, USA

12:20-12:30 PIP in the Evolving Health Care Environment
*Todd Wetzel, Philadelphia, PA, USA. Current President of NASS*
12:30 -12:50  The Story of Back Pain: from pathology to PiP. How did this happen?  
Chris Main, Edinburgh, UK

12:50 -13:05  Informed decision making: the roll of risk screening  
Christine Cedraschi, Geneva, Switzerland

13:05 -13:15  PiP: Optimizing the provider’s experience  
Tamar Pincus, London, UK

Greg Whitcomb, Wisconsin, USA

13:25 -13:45  What Have We Missed?  
Audience and Panel

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

14:00  Deformity / Growing Spine  
Plenary Hall  
Chairs: Dominique Rothenfluh, Oxford, UK; Eftimios Samoladas, Thessaloniki, Greece

QF1  MINIMAL CLINICALLY IMPORTANT DIFFERENCE (MCID) FOR CPCCHILD QUESTIONNAIRE FOLLOWING SCOLIOSIS SURGERY IN CEREBRAL PALSY  
Luigi Aurelio Nasto, Firoz Miyanji, Paul Sponseller, Tracey Bastrom, Suken Shah, Amer Samdani, Harry Shuffeberger, Burt Yaszay  
BC Children’s Hospital, Department of Orthopaedic Surgery, Vancouver, BC, Canada

QF2  RADIATION EXPOSURE DURING THE COURSE OF TREATMENT FOR EARLY-ONSET SCOLIOSIS—LONGITUDINAL PILOT STUDY  
En Xie, Dingjun Hao  
Hong–Hui Hospital,Xi’an Jiaotong University College of Medicine, Xi’an, Shaanxi, China

QF3  WHERE IS THE AXIS OF ROTATION IN THORACIC IDIOPATHIC SCOLIOSIS?  
Rob Brink, Tom Schlösser, Marijn vanStralen, Koen Vincken, Moyo Kruyt, Lin Shi, Winnie Chu, René Castelein, Jack Cheng  
Dept of Orthopaedic Surgery, University Medical Center Utrecht, The Netherlands

QF4  THE EFFICACY OF SERIAL CORRECTIVE CASTING FOR THE COMPENSATORY CURVE OF CONGENITAL SCOLIOSIS  
Shimei Tanida, Bungo Otsuki, Shunsuke Fujibayashi, Shuichi Matsuda, Noriaki Kawakami  
Department of Orthopaedic Surgery, Graduate School of Medicine, Kyoto University

QF5  DOES PROXIMAL HOOK FIXATION PREVENT MID-TERM PROXIMAL JUNCTIONAL KYPHOSIS IN PATIENTS OPERATED FOR ADOLESCENT IDIOPATHIC SCOLIOSIS?  
Felipe Rioseco, Alejandro Gomez-Rice, Javier Pizones, Felisa Sánchez-Mariscal, Jose Miguel Sánchez-Marquez, Mar Pérez Martín-Buitrago, Lorenzo Zúñiga, Nicomedes Fernández-Baillo, Francisco Javier Pérez-Grueso, Enrique Izquierdo  
Hospital Universitario La Paz, Hospital Universitario de Getafe, Madrid, Spain

QF6  EXTREME CORONAL CORRECTION AND AXIAL DEROTATION PROMPT TO POST-OPERATIVE SHOULDER IMBALANCE IN IMMATURE AIS PATIENTS  
Vicente García, Jesús Burgos, Carlos Barrios, Miguel Antón, Eduardo Hevia, Ignacio Sanpera, Gabriel Pizá, Miguel Castro  
Dept of Orthopaedic Surgery, Hospital Mancha Centro, Alcázar de San Juan, Ciudad Real; Hospital Ramón y Cajal, Madrid; Universidad Católica De Valencia , Valencia; Hospital Ramón Y Cajal, Madrid, España; Hospital Central La Fraternidad-Muprespa, Madrid; Hospital Universitari Son Espases, Islas Baleares; Hospital Son Espases, Palma De Mallorca, Islas Baleares; Hospital Materno Infantil Teresa Herrera. La Coruña, Spain
QF7 THE OUTCOME OF VARIOUS SURGICAL TREATMENTS OF SPINAL STENOSIS IN ACHONDROPLASIA: A SYSTEMATIC REVIEW
Zaid Abual-Rub, Jennifer Campbell, Ghulam Abbas, Almas Khan
Leeds General Infirmary, Leeds, UK

QF8 THORACOLUMBAR ADULT SCOLIOSIS PATIENTS: TWO-YEAR SURGICAL RESULTS OF A PROSPECTIVE COHORT
Javier Pizones, Mar Pérez Martín-Buitrago, Francisco Javier Sánchez Pérez-Grueso, Mariana Díaz-Almirón, Ahmet Alany, Ibrahim Obeid, Emre Acaroglu, Frank Kleinstueck, Ferran Pellisé, European Spine Study Group ESSG
Hospital Universitario La Paz, Madrid, Spain

QF9 IMPACT OF THREE COLUMN OSTEOTOMY ON HEALTH RELATED QUALITY OF LIFE MEASURES IN PATIENTS WITH ADULT SPINAL DEFORMITY: A SYSTEMATIC REVIEW AND META-ANALYSIS
Muralidham Venkatesan, Jagdeep Atwal, Dritan Pasku, Sarang Sapare, Nasir Quraishi
The Centre for Spinal Studies and Surgery, Nottingham, UK

QF10 IMPACT OF EARLY MAJOR RESOLVED COMPLICATIONS ON TWO-YEAR FOLLOW-UP OUTCOME FOLLOWING ADULT SPINAL DEFORMITY SURGERY
Susana Núñez-Pereira, Alba Vila-Casademunt, Montse Domingo-Sábat, Sleiman Haddad, Ibrahim Obeid, Ahmet Alany, Emre Acaroglu, Francisco Sánchez Pérez-Grueso, Frank Kleinstück, Ferran Pellisé, European Spine Study Group, ESSG
Vall d’Hebron Research Institute, Barcelona, Spain

QF11 IMPACT OF ILIAC INSTRUMENTATION ON THE QUALITY OF LIFE OF PATIENTS WITH ADULT SPINE DEFORMITY
Mar Pérez Martín-Buitrago, Javier Pizones, Francisco Javier Sánchez Pérez-Grueso, Mariana Díaz-Almirón, Emre Acaroglu, Ibrahim Obeid, Frank Kleinstueck, Ahmet Alany, Ferrán Pellisé, European Spine Study Group ESSG
Hospital Universitario La Paz, Madrid, Spain

QF12 PREDICTIVE MODELS TO AID SURGICAL DECISION-MAKING FOR THORACOLUMBAR ADULT SCOLIOSIS
Javier Pizones, Mar Pérez Martín-Buitrago, Francisco Javier Sánchez Pérez-Grueso, Mariana Díaz-Almirón, Ahmet Alany, Ibrahim Obeid, Emre Acaroglu, Frank Kleinstueck, Ahmet Alany, European Spine Study Group ESSG
Hospital Universitario La Paz, Madrid, Spain

QF13 GLOBAL ALIGNMENT AND PROPORTION (GAP) SCORE: DEVELOPMENT AND VALIDATION OF A NEW METHOD OF ANALYZING SPINOPELVIC ALIGNMENT TO PREDICT MECHANICAL COMPLICATIONS AFTER ADULT SPINAL DEFORMITY SURGERY
Caglar Yilgor, Nuray Sogunmez, Yasemin Yavuz, Ibrahim Obeid, Frank S. Kleinstueck, Francisco Javier Sanchez Perez-Grueso, Emre R. Acaroglu, Ferran Pellisé, Ahmet Alany, European Spine Study Group ESSG
School of Medicine, Acibadem University, Istanbul, Turkey

QF14 RELATIVE PELVIC VERSION (RPV): A NEW PI-BASED PROPORTIONAL PARAMETER THAT QUANTIFIES PELVIC VERSION MORE PRECISELY COMPARED TO PT
Caglar Yilgor, Nuray Sogunmez, Yasemin Yavuz, Ibrahim Obeid, Frank S. Kleinstueck, Francisco Javier Sanchez Perez-Grueso, Emre R. Acaroglu, Ferran Pellisé, Ahmet Alany, European Spine Study Group ESSG
School of Medicine, Acibadem University, Istanbul, Turkey

14:00 Basic Science
Wicklow Hall 1
Chairs: Werner Schmoelz, Innsbruck, Austria; Karin Wuertz-Kozak, Zuerich, Switzerland

QF15 COMPREHENSIVE BIOMECHANICAL ASSESSMENT OF THE HARDWARE BEHAVIOR AFTER PEDICLE SUBTRACTION OSTETOMY: FROM THEORY TO PRACTICE
Andrea Luca, Alessio Lovi, Lisa Babbit, Gabriele Ristori, Sara Razza, Marco Brayda-Bruno, Gabio Galbusera
IRCCS Galeazzi – Milan, Italy
QF16  THORACOLUMBAR ERECTOR SPINAE AND TRUNK OBLIQUES MUSCLE ACTIVITY DURING WALKING AT VARIOUS SPEEDS AND INCLINATIONS: DIFFERENCES BETWEEN YOUNG AND OLDER ASYMPTOMATIC ADULTS
Rebecca Crawford, Leonardo Gizzi, Áine Ni Mhuiris, Angela Dieterich, Deborah Falla
1 Institute for Health Sciences, Zurich University of Applied Sciences, Switzerland; 2 Faculty of Health Professions, Curtin University, Australia; 3 Continuum Biomechanics and Mechanobiology Research Group, University of Stuttgart, Germany; 4 Institute for Neurorehabilitation Systems, University Medical Centre, Göttingen, Germany; 5 Pain Clinic, Anesthesiology, University Medical Center Göttingen, Germany; 6 Centre of Precision Rehabilitation for Spinal Pain (CPR Spine), School of Sport, Exercise and Rehabilitation Sciences, College of Life and Environmental Sciences, University of Birmingham, UK.

QF17  THE EFFECT OF UPPER INSTRUMENTED VERTEBRA SELECTION ON PROXIMAL JUNCTION LOADING
Dominika Ignasiak, Tobias Peteler, Tamás Fekete, Daniel Haschtmann, Stephen J. Ferguson
Institute for Biomechanics, ETH Zurich, Zurich, Switzerland; Spine Center, Schulthess Clinic, Zurich, Switzerland

QF18  EFFECT OF GLUCOCORTICOID WITHDRAWAL ON GLUCOCORTICOID INDUCING BONE IMPAIRMENT
Gengyang Shen, Hui Ren, De Liang, Ting Qiu, Zhida Zhang, Wenhua Zhao, Jinjing Huang, Xiang Yu
Department of Spinal Surgery, Guangzhou, China

QF19  MYRICITRIN INHIBITS RANKL-MEDIATED OSTEOCLASTOGENESIS BY ATTENUATING THE NF-κB AND MAPKS SIGNALING PATHWAY
Lingbo Kong, Xiaobing Yang
Honghui Hospital, Xi'an, China

QF20  CHRONIC INFECTION IN LUMBAR DISC HERNIATION: WHAT IS THE ROLE OF BIOFILM FORMATION?
Søren Ohrt-Nissen, Blaine G Fritz, Jonas Walbom, Kasper N Kragh, Thomas Bjarnsholt, Benny Dahl, Claus Manniche
Dep. of Orthopaedics, Spine Unit, Rigshospitalet, Denmark

QF21  ACETABULAR AND LOWER LIMB ALTERATIONS IN ADOLESCENT IDIOPATHIC SCOLIOSIS
Mohammad Karam, Ayman Assi, Ziad Bakouny, Joe Ghanimeh, Georges Mjaess, Aya Karam, Chris Labaki, Fares Yared, Nour Khalil, Aren Joe Bizdikian, Wafa Skalli, Ismat Ghanem
1. Laboratory of Biomechanics and Medical Imaging, Faculty of Medicine, University of Saint-Joseph, Beirut, Lebanon; 2. Institut de Biomécanique Humaine Georges Charpak, Arts et Métiers, ParisTech, Paris, France

QF22  THE ALTERATION OF FULL BODY POSTURAL ALIGNMENT IN SUBJECTS WITH ADOLESCENT IDIOPATHIC SCOLIOSIS
Nour Khalil, Ayman Assi, Aren Joe Bizdikian, Fares Yared, Ziad Bakouny, Wafa Skalli, Virginie Lafage, Gaby Kreichati, Ismat Ghanem, Khalil Kharrat
1. Laboratory of Biomechanics and Medical Imaging, Faculty of Medicine, University of Saint-Joseph, Beirut, Lebanon; 2. Institut de Biomécanique Humaine Georges Charpak, Arts et Métiers, ParisTech, Paris, France; 3. Spine division, Hospital for Special Surgery, New York, USA

QF23  EFFECT OF GLOBAL POSTURAL ALIGNMENT ON GAIT: A STUDY ON 145 ASYMPTOMATIC SUBJECTS WITH A LARGE AGE RANGE
Joeffroy Otayek, Fares Yared, Aren Joe Bizdikian, Ayman Assi, Ziad Bakouny, Nour Khalil, Joe Ghanimeh, Chris Labaki, Abir Massaad, Virginie Lafage, Wafa Skalli, Ismat Ghanem, Khalil Kharrat, Gaby Kreichati
1. Laboratory of Biomechanics and Medical Imaging, Faculty of Medicine, University of Saint-Joseph, Beirut, Lebanon; 2. Institut de Biomécanique Humaine Georges Charpak, Arts et Métiers, ParisTech, Paris, France; 3. Spine division, Hospital for Special Surgery, New York, USA

QF24  THE IMPACT OF LOW BACK PAIN ON HEALTH-RELATED QUALITY OF LIFE IN SENIORS LIVING IN THE COMMUNITY
Christine Cedraschi, Christophe Luthy, Anne-Françoise Allaz, François Herrmann, Catherine Ludwig
Division of General Medical Rehabilitation, Geneva University Hospitals & University of Geneva, Switzerland
QF25  THE ASSOCIATED FACTORS OF LOW BACK PAIN IN PATIENTS WITH RHEUMATOID ARTHRITIS
Kazuto Miura, Osamu Morita, Toru Hirano, Kei Watanabe, Naoto Endo, Yugo Shobugawa
Dept. of Spine and Spinal Cord Surgery, Nagaoka, Japan

QF26  MECHANISM OF NEURAL COMPLICATION INDUCED BY CORRECTIVE SURGERY FOR SPINAL DEFORMITY -MULTI-INSTITUTIONAL SURVEY BY THE SPINAL CORD MONITORING WORKING GROUP OF THE JAPANESE SOCIETY FOR SPINE SURGERY AND RELATED RESEARCH-
Kei Yamada, Yukihiro Matsuyama, Shigenori Kawabata, Muneharu Ando, Naoya Yamamoto, Sho Kobayashi, Shiro Imagama, Tsukasa Kanchiku, Kanichiro Wada, Nobuaki Tadokoro
Dept of Orthopaedic Surgery,Kurume,Japan

QF27  ISOLATED LUMBAR EXTENSION RESISTANCE TRAINING FOR TREATING CHRONIC LOWER BACK PAIN - A RETROSPECTIVE STUDY ON 626 PATIENTS
Christoph Spang, Florestan Wagenblast, Desiree Haas, Florian Allen
Department of Integrative Medical Biology, Umea, Sweden; Orthopaedic Spine Center, Würzburg, Germany; Institute of Occupational and Social Medicine and Health Services Research, Tübingen, Germany

14:00  Degenerative Spine
Liffey Hall 2
Chairs: Aron Lazary, Budapest, Hungary; Sven Kevin Tschoeke, Dortmund, Germany

QF28  LONG-TERM OUTCOMES OF LUMBAR TOTAL DISC REPLACEMENT VERSUS SPINAL FUSION FOR THE TREATMENT OF DDD: A NOVEL META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS
Jack Zigler, Matthew Gornet, Nicole Ferko, Chris Cameron, Francine Schranck, Leena Patel
Texas Back Institute, Center for Disc Replacement; Plano, TX USA

QF29  MODIC TYPE I CHANGES ARE NOT DUE TO HERNIATED DISC INFECTION. A PROSPECTIVE STUDY WITH FAR LATERAL ENDOSCOPI DISCECTOMY.
Pandurang Dnyanraj Kulkarni, Christian Brogna, Prajwal Ghimire, Amanda Fife, Irfan Malik
Department of Neurosurgery, King's College Hospital, London, UK

QF30  FACTORS ASSOCIATED WITH SYMPTOMS OF ANXIETY AND DEPRESSION IN ADULTS UNDERGOING SPINE SURGERY - A SYSTEMATIC INTEGRATIVE REVIEW
Janni Strøm, Lene Bastrup Jørgensen, Merete Bjerrum, Cecilie Nørby Thisted, Tove Lise Nielsen, Claus Vinther Nielsen, Malene Laursen
Spine Unit, Elective Surgery Centre, Regional Hospital Central Jutland, Silkeborg, Denmark

QF31  DOES THE OUTCOME OF SURGERY FOR LUMBAR DEGENERATIVE SPONDYLOLISTHESIS DEPEND ON THE APPROPRIATENESS OF SURGERY?
Anne F Mannion, Valerie Pittet, John-Paul Vader, Felix Steiger, Martin Aepli, Dave O'Riordan, Francine Mariaux, Francois Porchet
Spine Center, Schulthess Klinik, Switzerland.

QF32  CRITERIA FOR "SUCCESS" AFTER SURGERY FOR SPINAL STENOSIS AND DEGENERATIVE SPONDYLOLISTHESIS. A MULTICENTRE OBSERVATIONAL STUDY FROM THE NORWEGIAN REGISTRY FOR SPINE SURGERY
Ivar M Austevoll, Margreth Grotle, Rolf Gjestad, Tore Solberg, Kjersti Storeheim, Jens Ivar Brox, Erlend Hermansen, Frode Rekeland, Karl Indrekravam, Christian Hellem
Kysthospitalet i Hagevik, Dept of Ortopedic, Bergen, Norway

QF33  CREATING LORDOSIS IN TRANSFORAMINAL AND POSTERIOR LUMBAR INTERBODY FUSION (TLIF/PLIF):THE IMPACT OF SURGICAL TECHNIQUE - A CONTROLLED CADAVERIC STUDY
Peter Robertson, Will Armstrong, Daniel Woods, Jeremy Rawlinson
The Orthopaedic Clinic, Mercy Specialist Centre, Auckland, New Zealand

QF34  ADJACENT SEGMENT DEGENERATION AND TOPPING OFF: NEVER STOP AT THE APEX!
Markus Konieczny, Shejda Mokhaberi, Ruediger Krauspe
University Hospital of Duesseldorf, Germany; Department of Orthopedic Surgery, Duesseldorf, Germany
QF35 LONG-TERM EFFICACY OF INTERLAMINAR STABILIZATION IN MEDICARE PATIENTS
Christina Dowe, Samuel Grinberg, Rachel Simon, Frank Cammisa, Celeste Abjornson
Hospital for Special Surgery, New York, NY, USA

QF36 ADJACENT LEVEL STENOSIS OR RECURRENT STENOSIS MORE COMMON AFTER
DECOMPRESSION WITH FUSION FOR LUMBAR SPINAL STENOSIS THAN AFTER
DECOMPRESSION ALONE.
Thomas Karlsson, Peter Försth, Bengt Sandén
Department of Orthopedics, Uppsala University Hospital

QF37 DISC HEIGHT RESTORATION WITH EXTREME LATERAL INTERBODY FUSION: DO WE
NEED TO DIRECTLY DECOMPRESS THE NERVE ROOTS?
Salvatore Russo, Khai Lam
Department of Neurosurgery, The National Hospital for Neurology and Neurosurgery,
London, UK

QF38 RADIOPHYSICAL CHANGES AND PERIOPERATIVE COMPLICATIONS AFTER OBLIQUE
LATERAL INTERBODY FUSION AT L4-5. ; PRELIMINARY REPORTS FOR
COMPARISON WITH THE CLASSICAL MINIMALLY-INVASIVE ALIF AT L4-5
Nam-Su Chung, Chang-Hoon Jeon, Han-Dong Lee, Young-Uk Seo
Dept of Orthopaedic, Ajou University Medical Center, Suwon, South Korea

QF39 REVISION SURGERY OF SYMPTOMATIC PSEUDARTHROSIS AFTER LUMBAR
FUSION: A VIABLE TREATMENT OPTION?
Markus Loibl, Anne Mannion, Siegmund Lang, Frank Kleinstück, Tamas Fekete, Dezso
Jeszenszky , Daniel Haschtmann
Spine Center, Schulthess Klinik, Zürich Switzerland

QF40 PEDICLE SCREW DIAMETER AFFECTS THE UNION RATE OF SINGLE LEVEL L4/5
TRANSFORAMINAL LUMBAR INTERBODY FUSION
Bungo Otsuki, Shunsuke Fujibayashi, Shimei Tanida, Shuichi Matsuda
Dept of Orthopedics, Kyoto Univ, Japan

QF41 BULKY BONE GRAFT VERUS GRANULAR BONE GRAFT IN LUMBAR FACET JOINT
FUSION: A PROSPECTIVE SELF-CONTROLLED COMPARATIVE STUDY
Bulong Zheng, Baorong He, Dingjun Hao
Dept of Spine Surgery, Xi’an, China

15:20-15:50 BREAK

15:50 – 17:30 Adult Deformity, Complications
Room: Plenary Hall
Chairs: Emre Acaroglu, Ankara, Turkey; Marco Teli, Liverpool, UK

9 ALTERATIONS IN ACETABULAR ORIENTATION AND HIP MORPHOLOGY IN
SUBJECTS WITH ADULT SPINAL DEFORMITY
Ayman Assi, Ziad Bakouny, Nour Khalil, Fares Yared, Joefroy Otayek, Aren Joe
Bizdikian, Mohammad Karam, Joe Ghanimeh, Chris Labaki, Virginie Lafage, Ismat
Ghanem, Gaby Kreichati, Wafa Skalli, Khalil Kharrat
1. Laboratory of Biomechanics and Medical Imaging, Faculty of Medicine,
University of Saint-Joseph, Beirut, Lebanon; 2. Institut de Biomécanique Humaine
Georges Charpak, Arts et Métiers, ParisTech, Paris, France; 3. Spine division,
Hospital for Special Surgery, New York, USA
10 POSTURAL CONSEQUENCES OF L4-SACRUM FUSION IN ACCOMMODATING POST-FUSION SITTING POSTURE: A RADIOGRAPHIC DATA-BASED SIMULATION MODEL
Avinash Patwardhan, Saeed Khayatzadeh, Jean-Charles Le Huec, Antonio Faundez, Robert Havey, Leonard Voronov, Michael Zindrick, Alexander Ghanayem
Department of Orthopaedic Surgery and Rehabilitation, Loyola University Chicago, Maywood, IL, USA

11 RELATIONSHIP BETWEEN SPINAL DEFORMITY IN THE AXIAL PLANE AND THE CORONAL COBB ANGLE IN ADOLESCENT IDIOPATHIC SCOLIOSIS
Ayman Assi, Mohammad Karam, Ziad Bakouny, Joeffroy Otayek, Gerard Bakhos, Cyril Hanna, Anthony Kassab, Virginie Lafage, Wafa Skalli, Abir Massaad, Ismat Ghanem
1. Laboratory of Biomechanics and Medical Imaging, Faculty of Medicine, University of Saint-Joseph, Beirut, Lebanon; 2. Institut de Biomécanique Humaine Georges Charpak, Arts et Métiers, ParisTech, Paris, France; 3. Spine division, Hospital for Special Surgery, New York, USA

12 ADULT SPINAL DEFORMITY PATIENTS HAVE DIFFERENT AGE-DEPENDENT SAGITTAL PARAMETERS TO PREDICT PATIENT-REPORTED OUTCOMES
Yong-Chan Kim, Cheung-Kue Kim, Hyung-Suk Juh, Tae-Hwan Kim, Ho-Guen Chang, Young-Woo Kim, Jae-Hyuk Shin
Department of Orthopaedic Surgery, Kyung Hee University Hospital at Gangdong, Seoul, Korea

13 A SINGLE SAGITTAL PARAMETER FOR DECISION MAKING IN ASD?
Louis Boissière, Caglar Yilgor, Daniel Larrieu, Anouar Bourghli, Derek Cawley, Takashi Fujishiro, Emre Acaroglu, Frank Kleinstueck, Francisco Javier Perez-Grueso, Ferran Pellisé, Jean-Marc Vital, Olivier Gille, Ahmed Alanay, Ibrahim Obeid; European Spine Study Group
Spine Unit 1, CHU Pellegrin, Bordeaux University Hospital, France

14 THE APPROPRIATE SAGITTAL PLANE CORRECTION TO INDIVIDUALIZED PROPORTIONATE SHAPE AND ALIGNMENT DOES NOT NECESSARILY MEAN MORE COMPLEX SURGERY IN ADULT SPINAL DEFORMITY
Caglar Yilgor, Nuray Sogunmez, Yasemin Yavuz, Ibrahim Obeid, Frank S. Kleinstueck, Francisco Javier Sanchez Perez-Grueso, Emre R. Acaroglu, Ferran Pellisé, Ahmet Alanay, ESSG European Spine Study Group
School of Medicine, Acibadem University, Istanbul, Turkey

15 SAGITTAL REALIGNMENT GOALS SHOULD BE SET TO IDEAL PROPORTIONATE SHAPE AND ALIGNMENT INDEPENDENT OF AGE
Caglar Yilgor, Nuray Sogunmez, Yasemin Yavuz, Ibrahim Obeid, Frank S. Kleinstueck, Francisco Javier Sanchez Perez-Grueso, Emre R. Acaroglu, Ferran Pellisé, Ahmet Alanay, ESSG European Spine Study Group
School of Medicine, Acibadem University, Istanbul, Turkey

16 GLOBAL ALIGNMENT AND PROPORTION (GAP) SCORE BETTER CORRELATES TO HRQOL SCORES AND BETTER PREDICTS MECHANICAL COMPLICATIONS COMPARED TO SCHWAB SAGITTAL MODIFIERS
Caglar Yilgor, Nuray Sogunmez, Yasemin Yavuz, Ibrahim Obeid, Frank S. Kleinstueck, Francisco Javier Sanchez Perez-Grueso, Emre R. Acaroglu, Ferran Pellisé, Ahmet Alanay, ESSG European Spine Study Group
School of Medicine, Acibadem University, Istanbul, Turkey
ANTEROLATERAL VERSUS POSTERIOR-ONLY APPROACH FOR THE CORRECTION OF DEGENERATIVE ADULT SPINAL DEFORMITY - 1: 2 MATCHED COHORT ANALYSIS OF 90 PATIENTS -
Se-Jun Park, Chong-Suh Lee, Sung-Soo Chung, Kyung-Joon Lee, Chan-Duk Park, Dong-Uk Kim, Jin-Sung Park
Dept of Orthopedic Surgery, Samsung Medical Center, Seoul, Korea

DISABILITY 2 YEARS AFTER SURGERY FOR ADULT SPINAL DEFORMITY (ASD) CAN BE RELIABLY PREDICTED AT 6 MONTHS' FOLLOW-UP
Miquel Serra, Ferran Pellisé, Susana Núñez-Pereira, Montse Domingo-Sàbat, Alba Vila-Casademunt, Ibrahim Obeid, Ahmet Alanay, Emre Acaroglu, Frank Kleinstück, Francisco Sánchez Pérez-Grueso, Anne F Mannion, European Spine Study Group (ESSG)
Centre for Research in Health and Economics (CRES), Barcelona, Spain; Hospital Universitari Vall Hebron, Barcelona, Spain; St. Franziskus-Hospital, Köln, Germany; Vall Hebron Institute of Research, Barcelona, Spain; Bordeaux University Hospital, Bordeaux, France; Acibadem University School of Medicine, Istanbul, Turkey; Ankara Spine Center, Ankara, Turkey; Schulthess Klinik, Zürich, Switzerland; Hospital Universitario La Paz, Madrid, Spain

THE IMPACT OF DEEP SURGICAL SITE INFECTION ON SURGICAL OUTCOMES IN ADULT PATIENTS UNDERGOING POSTERIOR FUSION FOR DEFORMITY CORRECTION: A MATCHED CONTROL STUDY
Spine Surgery Unit, Vall D'Hebron University Hospital, Barcelona, Spain

"AFTER-HOURS" EMERGENT SPINE SURGERY: PERHAPS WE SHOULD THINK TWICE?
Combined Neurosurgical and Orthopedic Spine Program, Department of Orthopedic Surgery, University of British Columbia, Vancouver, British Columbia, Canada; *Dept Orthopaedic Surgery, Centre hospitalier Universitaire de Québec, Québec, Québec, Canada; **Dept of Anesthesiology, Pharmacology and Therapeutics, University of British Columbia, British Columbia, Canada

17:30 – 18:30 WELCOME RECEPTION
Exhibition Area
08:30 – 10:00  **Degenerative Spine**  
Room: Plenary Hall  
Tamas Fekete, Zuerich, Switzerland; Serdar Kahraman, Istanbul, Turkey

21  INCIDENCE AND INFLUENCE OF DEPRESSION AND ANXIETY ON CLINICAL OUTCOME BEFORE AND ONE YEAR AFTER SPINE SURGERY FOR DEGENERATIVE DISC DISEASE  
*Ehab Shiban, Youssef Shiban, Bernhard Meyer*  
Department of Neurosurgery, Technical University Munich, Germany

22  ADJACENT SEGMENT DEGENERATION AFTER LUMBAR TOTAL DISC REPLACEMENT: 5-YEAR RESULTS OF A MULTICENTER, PROSPECTIVE, RANDOMIZED STUDY WITH INDEPENDENT RADIOGRAPHIC ASSESSMENT  
*Scott Blumenthal, Donna Ohnmeiss, Richard Guyer, Jack Zigler*  
Center for Disc Replacement, Plano, USA

23  A PROGNOSTIC MODEL OF THE OUTCOME OF SURGERY FOR DISC HERNIATION  
*Emin Aghayev, Lukas Staub, Frank Kleinstück, Daniel Haschtmann, Tamas Fekete, Francois Porchet, Anne Mannion*  
University of Bern, Bern, Switzerland

24  TIMING OF PATIENT-RATED FOLLOW-UP AFTER SURGERY FOR DEGENERATIVE LUMBAR DISORDERS  
*Tamas F Fekete, Daniel Haschtmann, Hans-Juergen Becker, Frank Kleinstueck, Dezsoe Jeszenszky, Peter Banczerowski*, Anne F Mannion  
Schulthess Clinic, Spine Center, Zürich, Switzerland; *National Institute of Clinical Neurosciences, Hungary

25  LUMBAR MICRODISCECTOMY FOR SCIATICA IN TOBACCO SMOKERS: A MULTICENTER OBSERVATIONAL STUDY  
*Mattis Madsbu, Øystein Nygaard, Tore Solberg, Clemens Weber, Øyvind Salvesen, Eric Franssen, David Werner, Sasha Gulati*  
Dept of Neurosurgery, St. Olavs Hospital, Trondheim, Norway

26  SURGICAL DECOMPRESSION FOR FORAMINAL AND EXTRAFORAMINAL LUMBAR DISC HERNIATION USING THE FAR-LATERAL APPROACH: PATIENT-RATED OUTCOME DEPENDS ON THE INVOLVED SEGMENT  
*Daniel Haschtmann, Anne F. Mannion, Markus Loibl, Francois Porchet, Frank Kleinstück, Dezsö Jeszenszky, Tamas Fekete*  
Schulthess Clinic, Zurich, Switzerland

27  CLINICAL RELEVANCE OF A NEW CLASSIFICATION SYSTEM FOR DEGENERATIVE SPONDYLOLISTHESIS OF THE LUMBAR SPINE  
*Olivier Gille, Soufiane Ghailane, Mathias Blangis, Camille Damade, Thibault Cloche, Jean-marc Vital*  
Spine Unit 1 - Bordeaux University hospital, Service Pr Gille, Bordeaux, France
28 INFLUENCE OF POSTURE ON PELVIC AND LUMBAR PARAMETERS: COMPARISON BETWEEN THE STANDING, SITTING AND SUPINE POSITIONS. A PRELIMINARY STUDY.
Olivier Gille, Thomas Chevillotte, Derek T Cawley, Houssam Bouloussa, Simon Mazas, Soufiane Ghailane, Marion Petit, Louis Boissière, Ibrahim Obeid, Jean Marc Vital
Institut de la Colonne Vertébrale Bordeaux, France

29 MINIMALLY INVASIVE VERSUS OPEN TRANSFORAMINAL LUMBAR INTERBODY FUSION: A PROSPECTIVE RANDOMIZED STUDY
Gabriel Tender, Anthony DiGiorgio
Louisiana State University, New Orleans, USA

30 COMPARISON OF MINIMAL INVASIVE AND OPEN TRANSFORAMINAL LUMBAR INTERBODY FUSION IN THE TREATMENT OF SINGLE LEVEL LUMBAR SPINE DEGENERATIVE DISEASES WITH MINIMUM 6-YEAR FOLLOW-UP
Dingjun Hao, Biao Wang, Hua Guo, Xiaodong Wang
Honghui Hospital, Xi’an Jiaotong University College of Medicine, Xi’an, China

31 COMPARING INTERLAMINAR STABILIZATION WITH DECOMPRESSION VERSUS FUSION WITH DECOMPRESSION IN REGARDS TO ADJACENT SEGMENT DISEASES
Christina Dowe, Samuel Grinberg, Rachel Simon, Frank Cammisa, Celeste Abjornson
Hospital for Special Surgery, New York, NY, USA

10:00-10:30 BREAK

10:30 – 12:00 Presidential Address and Medal Lectures
Room: Plenary Hall
Chairs: Frank Kandziora, Frankfurt, Germany; Thomas Blattert, Schwarzach, Germany

10:30 EUROSPINE Medal Lecture 2017

11:00 EUROSPINE Presidential Address
Margareta Nordin, Romorantin, France, .EUROSPINE President 2017

Honorary Medal for EuSSAB Representative
Johan van Lerbeirghe, Gent, Belgium
11:35  **Winner of the 2017 EUROSPINE Full Paper Award**  
TIME TO REMOVE OUR ROSE-TINTED SPECTACLES: A CANDID APPRAISAL OF THE RELATIVE SUCCESS OF SURGERY IN OVER 4'500 PATIENTS WITH DEGENERATIVE DISORDERS OF THE LUMBAR SPINE, HIP OR KNEE  
Anne F. Mannion¹, Franco M. Impellizzeri¹, Michael Leunig², Dezső Jeszenszky³, Hans-Jürgen Becker³, Daniel Haschtmann³, Stefan Preiss³, Tamas F. Fekete³  
¹Department of Teaching, Research and Development; ²Department of Hip and Knee Surgery; ³Department of Spine Surgery and Neurosurgery, Schulthess Klinik, Zurich, Switzerland

11:45  **Announcement of the EUROSPINE Grants 2017**  
Björn Rydevik, Gothenburg, Sweden

12:00-14:00  **EUROSPINE LUNCH SYMPOSUM, Thursday**

12:00  **EUROSPINE LUNCH SYMPOSUM 3**  
Wicklow Hall 1  
Challenges in the Management of Neuromuscular Spinal Deformities  
Chair: Hossein Mehdian, Nottingham, UK

12:10  Management of Adult Neuromuscular Spinal Disorders  
*Ferran Pellisé, Barcelona, Spain*

12:30  Discussion

12:35  Sagittal Deformities Management and Indications of Osteotomies and/or VCR  
*Dezső J. Jeszenszky, Zürich, Switzerland*

12:55  Discussion

13:00  Problems and Solutions for Cervicothoracic Junction  
*Francisco Javier Sánchez Pérez-Grueso, Madrid, Spain*

13:20  Discussion

Hossein Mehdian, Nottingham, UK

13:45  Discussion

13:50  Panel Discussion – Questions and Answers

12:00  **EUROSPINE LUNCH SYMPOSUM 4**  
Liffey Hall 2  
Enhanced Recovery After Surgery (ERAS) for Spinal Procedures  
Chair: Bertrand Debono, Toulouse, France; Jean Charles Le Huec, Bordeaux, France

12:15  1. Transforming Care: Why and How?  
2. Main principles of ERAS
3. ERAS in spinal surgery (Patient information, pathways…)
4. Applications in daily practice
5. Application to outpatient spine surgery
6. ERAS and e-health
7. Vision of an hospital director: Identify and manage obstacles
8. Changes of paradigm: Key points in the organization of care pathways

14:00 – 15:20  **Growing Spine, Diagnostics**
Room: Plenary Hall
René Castelein Utrecht, the Netherlands; Baoge Liu, Beijing, China

32  **DO LUMBAR ORTHOSES AFFECT THE MUSCULAR REGENERATION AFTER POSTERIOR LUMBAR FUSION?**  
A RANDOMIZED CONTROLLED TRAIL TO PROOF A DIFFERENCE IN MUSCLE REGENERATION WITH SURFACE ELECTROMYOGRAPHY
Yorck Rommelspacher, Jana Ziob, Hannah Bode, Charlotte Struwe, Rahel Bomemann, Andreas Strauss, Dieter Christian Wirtz, Robert Pflugmacher
Dept of Orthopedics and Trauma surgery, University Hospital Bonn, Germany

33  **PULMONARY CEMENT EMBOLISM FOLLOWING CEMENT AUGMENTED FENESTRATED PEDICLE SCREW FIXATION IN ADULT SPINAL DEFORMITY PATIENTS WITH SEVERE OSTEOPOROSIS (ANALYSIS OF 2978 FENESTRATED SCREWS)**
Meric Enercan, Isik Karalok, Emel Kaya, Onur Levent Ulusoy, Gokce Feride Inan, Cem Sever, Tunay Sanli, Sinan Kahraman, Selhan Karadereler, Azmi Hamzaoglu
Istanbul Spine Center, Istanbul, Turkey

34  **SAGITTAL ALIGNMENT REFERENCE PARAMETERS WITH A SLOT-SCANNING 3D X-RAY IMAGER: REPRODUCIBILITY**
Jean charles Le Huec, Kenichiro Sakai, Masashi Okamoto, Shun Hatsushikano, Fouad Jabbour, Kazu Hazegawa
Bordeaux University Hospital, Orthorachis 2 Department, CHU Pellegrin, Bordeaux, France

35  **OVERESTIMATION OF PAPERS WITH POOR LEVEL OF EVIDENCE AMONG THE TOP-100 MOST INFLUENTIAL STUDIES ON IDIOPATHIC SCOLIOSIS. A BIBLIOMETRIC ANALYSIS**
Carlos Barrios, Joel Gambin, Joaquín Alfonso
Valencia Catholic University, Valencia, Spain

36  **THE INCREASED ACTIVITY OF THE END PLATE OF THE VERTEBRAL BODIES AFTER SURGICAL CORRECTION OF SCHEUERMANN'A DISEASE.**
Michal Latalski, Marek Fatyga, Anna Danielewicz Bromberek
Children Orthopedic Department. Lublin, Poland
37 GROWTH VELOCITY OF FUSED SPINAL SEGMENT IN CHILDREN AFTER VERTEBRAL BODY RESECTION IN THE THORACOLUMBAR AND LUMBAR SPINE
Nikita Khusainov, Sergey Vissarionov, Dmitry Kokushin
Department of Spine pathology and Neurosurgery, Turners scientific research institute for pediatric orthopedics, Russia

38 SEVERE HYPERKYPHOSIS HARM'S AEROBIC CAPACITY AND MAXIMAL EXERCISE TOLERANCE IN PATIENTS WITH SCHEUERMANN DISEASE
Alejandro Lorente, Jesús Burgos, Carlos Barrios, Rocío Tamariz, Eduardo Hevia, Luis Miguel Antón, Rafael Lorente
Dept of Orthopaedic Surgery, Madrid, Spain

39 CONGENITAL CERVICO THORACIC SCOLIOSIS WITH HEMIVERTEBRA: INDICATED FOR POSTERIOR RESECTION
Yong Qiu, Zhonghui Chen, Xu Sun
Spine Surgery, Drum Tower Hospital of Nanjing University Medical School, Nanjing, China

40 HORIZONTALIZATION OF LIV: CRUCIAL TO PREVENT CORONAL DECOMPENSATION AFTER HEMIVERTEBRA RESECTION AND SHORT FUSION IN PATIENTS YOUNGER THAN 5 YEARS OLD?
Xu Sun, Song Li, Yong Qiu
Department of Spine Surgery, the Affiliated Drum Tower Hospital of Nanjing University Medical School, Nanjing, China

41 ASSESSING HEALTH RELATED QUALITY OF LIFE (HRQOL) IN CEREBRAL PALSY (CP) FOLLOWING SCOLIOSIS SURGERY: IS THE CP CHILD MEASURING WHAT WE WANT?
Luigi Aurelio Nasto, Firoz Miyanji, Tracey Bastrom, Paul Sponseller, Suken Shah, Amer Samdani, Randal Betz, Harry Shufflebarger, Michelle Marks, Baron Lonner
BC Children's Hospital, Department of Orthopaedic Surgery, Vancouver, Canada

15:20-15:50 BREAK

15:50 – 17:05 Cervical Spine
Room: Plenary Hall
Paulo Pereira, Porto, Portugal; Bernhard Meyer, Munich, Germany

42 COMPARISON OF POSTERIOR FOSSA DECOMPRESSION WITH AND WITHOUT DURAPLASTY FOR THE TREATMENT OF CHIARI I MALFORMATION: A PROSPECTIVE INVESTIGATION
Zezhang Zhu, Enze Jiang, Zhen Liu, Bin Wang, Yang Yu, Yong Qiu
Spine Surgery, Drum Tower Hospital of Nanjing University Medical School, Nanjing, China
43 NECK PAIN ASSOCIATION WITH MODIC CHANGES OF THE CERVICAL SPINE, PREVALENCE, RISK FACTORS, AND DISC DEGENERATION: A CROSS-SECTIONAL, LARGE-SCALE POPULATION-BASED STUDY
En Xie, Dingjun Hao
Hong–Hui Hospital, Xi'an Jiaotong University College of Medicine, Xi'an, Shaanxi, China

44 STRATEGIES FOR MAINTAINING HORIZONTAL GAZE IN ASYMPTOMATIC SUBJECTS
Ayman Assi, Ziad Bakouny, Nour Khalil, Michel Salameh, Naji Bou Zeid, Fares Yared, Joeffroy Otabek, Aren Joe Bizdikian, Renaud Lafage, Virginie Lafage, Ismat Ghanem, Wafa Skalli, Khalil Kharrat, Gaby Kreichati
Laboratory of Biomechanics and Medical Imaging, Faculty of Medicine, University of Saint-Joseph, Beirut, Lebanon

45 PATIENTS BELIEFS ABOUT DIAGNOSIS AND TREATMENT OF CERVICAL SPONDYLOSIS
Clemens Weber, Maziar Behbahani, Roald Baardsen, Jens Lehmberg, Bernhard Meyer, Ehab Shiban
Dept. of Neurosurgery, Stavanger, Norway

46 SURGICAL OUTCOME OF ELDERLY PATIENTS OVER 80 YEARS WITH CERVICAL SPONDYLOTIC MYELOPATHY
Norihiro Isogai, Narihito Nagoshi, Junichi Yamane, Akio Iwanami, Hitoshi Kono, Yoshimi Kobayashi, Nobuyuki Fujita, Mitsuru Yagi, Kota Watanabe, Kazuya Kitamura, Yuta Shiono, Masaya Nakamura, Morio Matsumoto, Ken Ishii
Spine and Spinal Cord Center, Mita Hospital, International University of Health and Welfare, Tokyo, Japan

47 RAPIDLY PROGRESSIVE NEUROLOGICAL DETERIORATION IN CERVICAL SPONDYLOTIC MYELOPATHY WITH CERVICAL INTRAMEDULLARY HIGH-INTENSITY AREA AND HISTORY OF CARDIOVASCULAR EVENT
Eiji Takasawa, Yasunori Sorimachi, Yoichi Iizuka, Haku Iizuka, Hirotaka Chikuda
Department of Orthopedic Surgery, Japanese Red Cross Maebashi Hospital, Maebashi, Japan; Department of Orthopedic Surgery, Gunma University Graduate School of Medicine, Maebashi, Japan

48 PREVALENCE, PROGRESSION, AND CLINICAL IMPLICATIONS OF HETEROTOPIC OSSIFICATION AFTER CERVICAL DISC ARTHROPLASTY AT 7 YEARS
Jacques Beaurain, Pierce Nunley
Neurosurgery Department, University Hospital, Dijon, France

49 MORTALITY, COMPLICATION AND FUSION RATES OF PATIENTS WITH ODONTOID FRACTURE
Yann Philippe Charles, Benjamin Blondel, Stéphane Fuentes, Jérémy Allia, Sébastien Schuller, Joël Godard, Paulo Marinho, Eurico Freitas, Julien Berthiller, Cédric Barrey
Société Française de Chirurgie Rachidienne (SFCR) Strasbourg, France

50 COMPARISON OF THREE-DIMENSIONAL HELICAL AXES OF THE CERVICAL SPINE BETWEEN IN VITRO AND IN VIVO TESTING
René Jonas, Robert Demmelmaier, Steffen Paul Hacker, Hans-Joachim Wilke
Institute of Orthopaedic Research and Biomechanics
17:10 EUROSPINE NEW MEMBER COCKTAIL AND GENERAL ASSEMBLY
Room: Wicklow Hall 1
Members only

20:00 OFFICIAL CONGRESS EVENING
NETWORK EXPERIENCE @ GUINNESS STOREHOUSE
(At own expense)
Attire: smart casual

Friday, 13 October, 2017

08:30 – 10:00 Trauma, Tumor, Infection and Degenerative Lumbar Spine
Plenary Hall
Chairs: Matti Scholz, Frankfurt, Germany; Zdenek Klezl, Derby, UK

51 ANALYSIS OF DYNAMIC FACTORS IN PATIENTS WITH THORACIC SPONDYLOTIC MYELOPATHY
Norimitsu Wakao, Mikinobu Takeuchi, Mitsuhiro Kamiya, Atsuhiko Hirasawa, Masakazu Takayasu, Masataka Deie
Spine Center, Aichi, Japan

52 CONSTRUCT VALIDITY AND TEST-RETEST RELIABILITY OF THE SPINE ONCOLOGY STUDY GROUP OUTCOME QUESTIONNAIRE (SOSGOQ)
AOSpine Knowledge Forum Tumor

53 SOURCES OF PATIENTS: EXPECTATIONS OF LUMBAR SURGERY
Federico P. Girardi, Roland Duculan, Alex Fong, Manuela C. Rigaud, Carol A. Mancuso
Hospital for Special Surgery, New York, USA

54 DOES STANDARD SURGICAL PREPARATION IN SPINE SURGERY ERADICATE PROPIONIBACTERIUM SPECIES DWELLING IN SKIN?
Christina Dowe, Samuel Grinberg, Rachel Simon, Frank Cammisa, Celeste Abjornson
Hospital for Special Surgery, New York, USA

55 OCTENIDINE DEMONSTRATES A SIGNIFICANTLY HIGHER EFFECTIVENESS AGAINST A SPINE-SPECIFIC MICROBIOME
Claudia Eder, Peter Landowski, Gerlinde Angerler, Sabrina Schildböck, Michael Ogon
Spine Center, Department of Spine Surgery, Orthopaedic Hospital Vienna-Speising, Vienna, Austria
56 INCIDENCE AND RISK FACTORS FOR FACET JOINT VIOLATION IN OPEN VERSUS MINIMAL-INVASIVE PROCEDURE DURING PEDICLE SCREW PLACEMENT IN TRAUMA PATIENTS
Christian Herren, Miguel Pishnamaz, Philipp Lichte, Hagen Andruszkow, Frank Hildebrand, Philipp Kobbe
Department of Orthopaedic Trauma, Aachen, Germany

57 IS SALVAGED BLOOD TRANSFUSION APPROPRIATE IN METASTATIC SPINE TUMOUR SURGERY? A PROSPECTIVE CLINICAL STUDY
Naresh Kumar, Aye Sandar Zaw, Dhiraj Sonawane, Jonathan Tan
National University Health System, Singapore, Singapore

58 INFLUENCE OF METASTASECTOMY, PALLIATIVE DECOMPRESSION AND TARGET THERAPY ON OUTCOME OF PATIENTS WITH SPINAL METASTASES OF RENAL CELL CARCINOMA
Nikita Zaborovskii, Dmitrii Ptashnikov, Dmitrii Mikhailov, Oleg Smekalenkov, Sergei Masevnin, Stanislav Kostritckii, Elnara Zamanova
R.R.Vreden Russian Research Institute of Traumatology and Orthopedics, Sankt-Petersburg, Russia

59 LOW-GRADE INFECTION IN SPINAL INSTRUMENTATION: IS THIS THE REAL CAUSE OF SCREW LOOSENING?
Ehab Shiban, Insa Janssen, Jens Lehmberg, Florian Ringel, Bernhard Meyer
Department of Neurosurgery, Technical University of Munich, Germany

60 QUALITY OF LIFE AND UTILITY SCORES AMONG CANADIAN TRAUMATIC SPINAL CORD INJURY PATIENTS: A NATIONAL CROSS-SECTIONAL STUDY
Nicolas Dea, Christian Iorio-Morin, Vanessa Noonan, Barry White
Division of Neurosurgery, Université de Sherbrooke, Canada

61 SURGEONS’ PREOPERATIVE EXPECTATIONS PREDICT FULFILLMENT OF PATIENTS’ EXPECTATIONS TWO YEAR AFTER LUMBAR SURGERY
Federico P. Girardi, Roland Duculan, Alex Fong, Manuela C. Rigaud, Carol A. Mancuso, presented by Andrew A. Sama
Hospital for Special Surgery, New York, USA

10:00-10:30 BREAK

10:30 – 12:00 The ‘Best of Show’ and Award papers
The highest scored abstract submissions
The 2017 Best Podium Award will be evaluated out of the presentations 62-67 of this session.
The audience is asked to vote via the EUROSPINE app
Plenary Hall
Chairs: Michael Ogon, Vienna, Austria; Björn Rydevik, Gothenburg, Sweden
62 DISC WALL STRUCTURAL ABNORMALITIES MAY ACT AS INITIATION SITES FOR HERNIATION
Kelly Wade, Nikolaus Berger-Roscher, Marija Josipovic, Volker Rasche, Fabio Galbusera, Hans-Joachim Wilke
Institute of Orthopaedic Research and Biomechanics, Ulm University, Ulm, Germany

63 TIME TO REMOVE OUR ROSE-TINTED SPECTACLES: A CANDID APPRAISAL OF THE RELATIVE SUCCESS OF SURGERY IN OVER 4'500 PATIENTS WITH DEGENERATIVE DISORDERS OF THE LUMBAR SPINE, HIP OR KNEE
Anne F Mannion, Franco Impellizzeri, Michael Leunig, Dezső Jeszenszky, Hans-Jürgen Becker, Daniel Haschtmann, Stefan Preiss, Tamas F Fekete
Schulthess Klinik, Zürich, Switzerland

64 PREDICTIVE SCORES UNDERESTIMATE SURVIVAL OF PATIENTS WITH SPINAL METASTATIC DISEASE
Christian Carrwik, Yohan Robinson
Dept of Surgical Sciences, Uppsala University Hospital, Sweden

65 NATURAL HISTORY OF LUMBAR DEGENERATIVE KYPHOSIS WITH CONSERVATIVE TREATMENT - DO CLINICAL SYMPTOMS AND RADIOLOGICAL PARAMETERS PROGRESS?
Whoan Jeang Kim, Kun Young Park, Jae Won Lee, Shann Haw Chang, Kyung Hoon Park
Dept of Orthopedic Surgery, Eulji University Hospital, Daejeon, South Korea

66 IS PREOPERATIVE DURATION OF SYMPTOMS A SIGNIFICANT PREDICTOR OF FUNCTIONAL OUTCOMES IN PATIENTS UNDERGOING SURGERY FOR THE TREATMENT OF DEGENERATIVE CERVICAL MYELOPATHY?
Lindsay Tetreault, Jefferson Wilson, Mark Kotter, Pierre Côté , Aria Nouri, Branko Kopjar, Paul Arnold, Michael Fehlings
Toronto Western Hospital, Department of Neurosurgery; University College Cork, School of Medicine, Toronto, Canada

67 NO LONG TIME BENEFIT FROM FUSION IN DECOMPRESSION SURGERY FOR LUMBAR SPINAL STENOSIS. 5 YEAR-RESULTS FROM THE SWEDISH SPINAL STENOSIS STUDY, A MULTICENTER RCT OF 233 PATIENTS
Peter Försth, Thomas Carlsson, Bengt Sandén, Karl Michaelsson
Dept of Orthopedics, Uppsala University Hospital, Sweden

11:20 Winner of 2016/2017 Grammer/European Spine Journal Award
THE EFFECT OF SIMULATED MICROGRAVITY ON LUMBAR SPINE BIOMECHANICS: AN IN VITRO STUDY
Cory J. Laws, Britta Berg-Johansen, Alan R. Hargens, Jeffrey C. Lotz
Eur Spine J (2016) 25:2889-2897

11:30 Max Aebi Award for Clinical Sciences
INCIDENCE OF CANCER IN ADOLESCENT IDIOPATHIC SCOLIOSIS PATIENTS TREATED 25 YEARS PREVIOUSLY
Simony A, Hansen EJ, Christensen SB, Carreon LY, Andersen MO

11:40 Announcement of the Best Podium Award
11:45 **EUROSPINE's Education Activities**
Bernhard Meyer, Munich, Germany

11:55 **EUROSPINE's Patient Information Platform: Patient Line**
Tamar Pincus, London, UK

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

12:00 **EUROSPINE LUNCH SYMPOSIUM 5**
Liffey Hall 2
*Live surgery session*

*Chairs: Hossein Mehdian, Nottingham, UK; Klaus John Schnake, Fürth, Germany*

12:10 **Tumour: Chordoma of the Sacrum en Bloc Total Sacrectomy and Lumbopelvic Reconstruction**
*Peter Pal Varga, Aron Lazary, Budapest, Hungary*

12:30 **Discussion**

12:35 **Trauma: Percutaneous Stabilization of T12 Fracture and a L5 Fracture**
*Matti Scholz, Frankfurt, Germany*

12:55 **Discussion**

13:00 **Degenerative: Minimally Invasive Double Approach (Anterior and Posterior) to the Lumbar Spine**
*Roberto Bassani Milan, Italy*

13:20 **Discussion**

13:25 **Disc Herniation: Surgical Management of Thoracic Disc Herniation**
*Hossein Mehdian Nottingham, UK*

13:45 **Discussion**

12:00 **EUROSPINE LUNCH SYMPOSIUM 6**
*In collaboration with Oxford Medical Training*
Wicklow Hall 1

*Management of Difficult Patients and Families*

*Chair: Pedro Berjano, Milano, Italy*

*Faculty: Stephen McGuire, Head of Development, Oxford Medical Training, Mr John O'Dowd Consultant Orthopaedic Spinal Surgeon, London UK*

Interaction with angry or reluctant patients and relatives are one of the most undesired experiences a clinician faces in his professional life. The goal of this session is to explore the topic of ‘difficult people’ in the medical environment including the drivers of their behaviour, the impact they have on doctors and tactics for moving forward. Stephen McGuire is a professional in medical education and doctor-patient communication and will provide his expertise to analyze the
causes, consequences and strategies to reduce physician’s stress and improve communication. John O’Dowd and Pedro Berjano are spine surgeons with more than 20 years of experience and a career-long interest in improving the communication with their colleagues and patients and will interact with Stephen to facilitate the achievement of the goals of the session.

12:15 Introduction: Difficult people: harder work, greater stress and poorer results?
What do we mean by ‘difficult’ people?
How do ‘difficult’ people make us feel?
What makes people ‘difficult’?
- Why do people not do what we want them to?
- Why do people complain?
Is there a strategy to move forward with ‘difficult’ people?
Questions and observations from the audience

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

<table>
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<tr>
<th>Time</th>
<th>Session Title</th>
<th>Chair(s)</th>
<th>Location</th>
<th>Authors/Institutions</th>
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<tr>
<td>14:00</td>
<td>New Techniques and Imaging</td>
<td>Nasir Quraishi, Nottingham, UK; Elias Papadopoulos, Athens, Greece</td>
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<td>QF42 NEW SURGICAL METHODS IN A HEALTH ECONOMIC PERSPECTIVE</td>
<td>Oddrun A. Fredriksli, Greger Løenne, Hege Andresen, Øystein P. Nygaard, Lars G. Johnsen Dept of Neurosurgery St.Olavs Hospital/ NTNU, Norwegian University of Science and Technology, Trondheim, Norway</td>
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<td>QF43 A SIMPLE WAY TO SEE THE SCOLIOSIS IN 3D: THE VERTEBRA VECTORS PROJECTION IN HORIZONTAL PLANE</td>
<td>Tamas Illés, Fabien Lauer, Francois Lavaste, Jean Dubousset Deptartment of Orthopedics, CHU-Brugman, ULB/VUB, Brussels, Belgium</td>
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<td>QF44 THREE-DIMENSIONAL RECONSTRUCTIONS OF THE RIB CAGE IN ADOLESCENT IDIOPATHIC SCOLIOSIS: WHAT DETERMINES GIBBOSITY?</td>
<td>Ayman Assi, Mohammad Karam, Michel Salameh, Gerard Bakhos, Aya Karam, Georges Mjaess, Rhea Nacouzi, Eddy Saad, Naji Bou Zeid, Gaby Krechati, Khalil Kharrat, Joeffroy Otayek, Anthony Kassab, Cyril Hanna, Chris Labaki, Joe Ghanehm, Ziad Bakouny, Wafa Skalli, Ismat Ghanem 1. Laboratory of Biomechanics and Medical Imaging, Faculty of Medicine, University of Saint-Joseph, Beirut, Lebanon; 2. Institut de Biomécanique Humaine Georges Charpak, Arts et Métiers, ParisTech, Paris, France</td>
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<td>QF45 WHAT DETERMINES ERRORS ON 3D SPINE RECONSTRUCTIONS OF SCOLIOTIC PATIENTS?</td>
<td>Joeffroy Otayek, Ayman Assi, Gerard Bakhos, Cyril Hanna, Ziad Bakouny, Mohammad Karam, Wafa Skalli, Fares Yared, Aren Joe Bizdikian, Ismat Ghanem 1. Laboratory of Biomechanics and Medical Imaging, Faculty of Medicine, University of Saint-Joseph, Beirut, Lebanon; 2. Institut de Biomécanique Humaine Georges Charpak, Arts et Métiers ParisTech, Paris, France</td>
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QF46  THE USE OF PATIENT-SPECIFIC TEMPLATES IN THORACIC SCOLIOSIS SURGERY
Janez Mohar, Robert Cirman, Rene Mihalic
Department of Spine Surgery and Paediatric Orthopaedics, Valdoltra Orthopaedic Hospital, Ankaran, Slovenia

QF47  COMPARISON BETWEEN DIFFERENT RADIOGRAPHIC METHODS FOR ASSESSMENT OF THE CURVE FLEXIBILITY IN AIS (>70° CURVES)
Sinan Kahraman, Seihan Karadereler, Cem Sever, Isik Karalok, Sezgi Burcin Barlas, Gokce Feride Inan, Tunay Sanli, Meric Enercan, Azmi Hamzaoglu
Dept of Orthopaedics and Traumatology, Istanbul, TURKEY

QF48  FAILURE TO VALIDATE THE AGE-ADJUSTED ALIGNMENT THRESHOLDS CONCEPT IN AN ADULT SPINAL DEFORMITY DATABASE
Caglar Yilgor, Nuray Sognmez, Yasemin Yavuz, Ibrahim Obeid, Frank S. Kleinstueck, Francisco Javier Sanchez Perez-Grueso, Emre R. Acaroglu, Ferran Pellisé, Ahmet Alanay, ESSG European Spine Study Group
School of Medicine, Acibadem University, Istanbul, Turkey

QF49  ARE PATIENT-SPECIFIC RODS EFFECTIVE TO MANAGE ADULT SPINAL DEFORMITY?
Vincent Fiere, Henri D'Astorg, Marc Szadkowski, Evalina Burger
Santy Orthopaedic Center, Spine Unit, Lyon - France

QF50  USE OF S2-ALAR-ILIAC SCREWS DOES NOT PROMOTE SACROILIAC JOINT FUSION IN PATIENT WITH ADULT SPINAL DEFORMITY
Zhen Liu, Yong Qiu, Changchun Tseng, Bangping Qian, Bin Wang, Zezhang Zhu
Spine Surgery, Drum Tower Hospital of Nanjing University Medical School, Nanjing, China

QF51  ALTERATION OF SENSORIMOTOR NETWORK IN LUMBAR SPINAL STENOSIS USING RESTING-STATE FUNCTIONAL CONNECTIVITY MRI
Eiji Takasawa, Yasunori Sorimachi, Yoichi Izuka, Haku Izuka, Hirotaka Chikuda
Department of Orthopaedic Surgery, Japanese Red Cross Maebashi Hospital, Maebashi, Japan, Department of Orthopaedic Surgery, Gunma University Graduate School of Medicine, Maebashi, Japan

QF52  TREATMENT OF CHRONIC LOW BACK PAIN VIA ABLATION OF THE BASIVERTERbral NERVE: RESULTS OF THE SMART TRIAL
Jörg Franke, Bernhard Meyer, Peter Vajkoczy, Alfred Rhyne, Jeff Fishground, Rick Sasso, Hyun Bae, Christopher Yeung, Eric Truumees, Philip Yuan
Department of Orthopedics; Klinikum Magdeburg, Germany

QF53  DYNAMIC POSTERIOR STABILIZATION VERSUS POSTERIOR LUMBAR INTERVERTEBRAL FUSION: A MATCHED COHORT STUDY BASED ON THE SPINE TANGO REGISTRY
Kelly Goodwin, Kathrin Bieri, Emin Aghayev, Ralph Greiner-Perth
SwissRDL, Institute of Social and Preventive Medicine, University of Bern, Switzerland

QF54  DOES TI-COATING IMPROVE PEEK CAGES OSTEOCONDUCTIVE PROPERTIES? A PROSPECTIVE RANDOMIZED CLINICAL TRIAL
Marcus Rickert, Michael Rauschmann
Spine Department, University Hospital Friedrichsheim gGmbH, Frankfurt am Main, Germany

14:00  Trauma, Tumor
Wicklow Hall 2B
Chairs: Hossein Mehdian, Nottingham, UK; Andrzej Maciejczak, Tarnow, Poland

QF55  SURGICAL AGGRESSIVENESS INDEX IN SURGERY FOR METASTATIC SPINE DISEASE
Naresh Kumar, Barry Tan, Aye Sandar Zaw
National University Health System, Singapore

QF56  PROSPECTIVE EVALUATION OF MECHANICAL STABILITY IN RELATION TO PAIN RESPONSE TO RADIOTHERAPY FOR SPINAL METASTASES
Joanne van der Velden, Anne Versteeg, Charles Fisher, Cumhur Öner, Jorrit-Jan Verlaan
University Medical Center Utrecht, Department of Radiation Oncology, Utrecht, The Netherlands
QF57  ABDOMINAL FAT DISTRIBUTION AS PROGNOSTIC FACTOR FOR SURVIVAL IN PATIENTS WITH SPINAL METASTASES
Paul van Urk, Joanne van der Velden, Bart Pielkenrood, Jorrit-Jan Verlaan
Dept of Orthopaedics, University Medical Center Utrecht, Utrecht, The Netherlands

QF58  ANALYSIS OF FUNCTIONAL OUTCOMES AND COMPLICATIONS AFTER PALLIATIVE SURGERY AND RADICAL SURGERY IN METASTATIC SPINE DISEASE
Keun-Young Choi, Young-Hoon Kim, Kee-Yong Ha, Sang-II Kim, Hyeong-Youl Park, Joo-Hyun Ahn
Dept. of Orthopaedic Surgery, Seoul, Korea

QF59  RELATIONSHIP ANALYSES BETWEEN EPIDURAL SPINAL CORD COMPRESSION (ESCC) SCALE AND SEVERITY OF PARALYSIS OR IMPENDING PARAPLEGIA IN METASTATIC SPINE TUMOR
Yasuaki Tokuhashi, Hiroshi Uei, Masafumi Maseda, Masashi Oshima
Dept of Orthop Surg, Nihon University, Tokyo, Japan

QF60  TAG ARRAY GENE CHIP FOR SIMULTANEOUSLY RAPID DIAGNOSIS OF FIRST- AND SECOND-LINE ANTI-TUBERCULOSIS DRUG RESISTANCE IN MYCOBACTERIUM TUBERCULOSIS-A FEASIBILITY STUDY AUTHORS
Wenjie Wu, Peng Cheng, Jingtong Lyu, Zehua Zhang, Jianzhong Xu
Department of Orthopaedics, Southwest Hospital, Third Military Medical University

QF61  THE PREVALENCE OF DIFFUSE IDIOPATHIC SKELETAL HYPEROSTOSIS AMONG ACUTE TRAUMA PATIENTS IN SWEDEN
Atsuhiko Hirasesa, Yohan Robinson, Claes Olerud, Norimitsu Wakao, Mitsuhiro Kamiya,
Mikinobu Takeuchi, Masataka Deie
Dept of Orthopaedic surgery, Aichi Med Univ., Japan

QF62  POSTERIOR REDUCTION AND STABILIZATION FOR THE TREATMENT OF COMPLETE THORACOLUMBAR FRACTURE-DISLOCATIONS
Dingjun Hao, Xiaodong Wang, Hua Guo, Biao Wang
Honghui Hospital, Xi’an Jiaotong University College of Medicine

QF63  CLINICAL AND RADIOGRAPHIC OUTCOME OF TREATMENT OF THORACOLUMBAR FRACTURES WITHOUT NEUROLOGY. OPEN VS PERCUTANEOUS C-ARM - GUIDED VS PERCUTANEOUS 3D NAVIGATION: GUIDED PEDICLE SCREW FIXATION,
Marek Roclawski, Rafa Pankowski, Stanislaw Adamski, Wojciech Kloc, Witold Libionka
Department of Orthopaedics, Medical University, Gdansk, Poland
Department of Neurosurgery, Copernicus Hospital, Gdansk, Poland
Department of Neurology and Neurosurgery, Faculty of Medical Sciences, University of Warmia and Mazury, Olsztyn,Poland

QF64  RISK FACTORS FOR KYPHOTIC RECURRENCE AFTER TEMPORARY SHORT-SEGMENT FIXATION FOR THORACOLUMBAR BURST FRACTURES
Hiroyuki Aono, Keisuke Ishii, Shota Takenaka, Yukitaka Nagamoto, Hidekazu Tobimastu,
Masayuki Furuya, Tomoya Yamashita
Dept of Orthopedic Surgery, Osaka National Hospital

QF65  SINGLE STAGE POSTERIOR VERTEBRAL COLUMN RESECTION (PVCR) AND INTERNAL FIXATION FOR SURGICAL TREATMENT OF UNSTABLE THORACAL/THORACOLUMBAR BURST FRACTURE
MERIC ENERCAN, CEM SEVER, SELHAN KARADERELER, SINAN KAHRAMAN, ONUR LEVENT ULUSOY, ISIK KARALOK, YESIM EROL, TUNAY SANLI, AZMI HAMZAOGLU
Istanbul Spine Center

QF66  IS THE PELVIC INCIDENCE RELATED WITH THE RESORPTION OF HERNIATED LUMBAR DISC?
Nam-Su Chung, Chang-Hoon Jeon, Han-Dong Lee, Young-Uk Seo
Dept of Orthopaedic, Ajou University Medical Center, Suwon, South Korea

QF67  AN ANATOMIC EVALUATION OF RETROPERITONEAL ORGANS FOR LATERAL APPROACH SURGERY: PROSPECTIVE IMAGING STUDY USING COMPUTED TOMOGRAPHY IN LATERAL DECUBITUS POSITION.
Jun Ouchida, Tokumi Kanemura, Kotaro Satake, Hiroaki Nakashima, Naoki Segi
Dept of Orthipedic Surgery, Nagoya, Japan
QF68 CHARACTERISTICS OF CERVICAL SPINE INJURY IN THE AGED SOCIETY (THE AGING RATE: >33.3%)
Toshiyuki Dokai1, Toru Yonei1, Tetsuya Otsuka1, Ryunosuke Kono1, Hideki Nagashima2
1) Dept of Orthopedic Surgery, Masuda Red Cross Hosp, Masuda, Japan; 2) Dept of Orthopedic Surgery, School of Medicine, Tottori University, Yonago, Japan

QF69 USE OF COMI FOR COMPARISON OF ANTERIOR CERVICAL DISCECTOMY AGAINST POSTERIOR FORAMINOTOMY AS TREATMENT FOR CERVICAL RADICULOPATHY
Anastasios Benjamin Konteas, Nick Carleton-Bland, Maggie Lee, Simon Clark, Martin Wilby
The Walton Centre Liverpool NHS Trust

QF70 MORTALITY AND UNEXPECTED SURGERY RATE IN PATIENTS WITH CERVICAL MYELOPATHY SURGICALLY TREATED. REVIEW OF 305 CASES OF AN INSTITUTION.
Manuel Ramirez Valencia, Xavier Plano Jerez, Antonia Matamalas Adrover, Ana Garcia de Frutos, Pilar González-Tartière, Joan Bagó Granell, Ferran Peliáu Urquiza, José Manuel Casamitjana Ferrándiz
Vall d'Hebron University Hospital, Barcelona, Spain; Teknon Clinic, Barcelona, Spain

QF71 RELATIONSHIP BETWEEN CLINICAL AND RADIOLOGICAL RESULTS IN PATIENTS SUBMITTED TO ANTERIOR CERVICAL DISCECTOMY AND FUSION
Bruno Maia, Pedro Carvalhais, Luis Teixeira
Spine Center - Cirurgia da Coluna, Coimbra, Portugal

QF72 LONG-TERM OUTCOMES OF ARTHRoplasty FOR CERVICAL MYELOPATHY VERSUS RADICULOPATHY, AND ARTHRoPLASTY VERSUS ARTHRODESIS FOR CERVICAL MYELOPATHY
The Orthopedic Center of St. Louis, St. Louis, USA

QF73 COMPARING COST-EFFECTIVENESS OF ARTHRoPLASTY WITH FUSION IN TREATMENT FOR ONE LEVEL CERVICAL RADICULOPATHY
Oddrun A. Fredriksli, Jarle Sundseth, Frode Kolstad, Hege Andresen, Kay Müller, Erling Myrseth, John A. Zwart, Oystein P. Nygaard, Lars G. Johnsen
Dept of Neurosurgery/NTNU, Norwegian University of Science and Technology, Trondheim, Norway

QF74 ASSESSING FUSION, SUBSIDENCE AND ALIGNMENT IN THE CERVICAL SPINE: COMPARISON OF DIFFERENT MEASUREMENTS ON PLANS RADIOGRAPHS.
Ehab Shiban, Jens Lehmberg, Bernhard Meyer
Department of Neurosurgery, Technical University of Munich, Germany

QF75 ARE THE RADIOGRAPHIC COMPONENTS OF THE AMES-ISSG CLASSIFICATION SPECIFIC TO CERVICAL DEFORMITY?
Ziad Bakouny, Nour Khalil, Michel Salameh, Naji Bou Zaid, Renaud Lafage, Ismat Ghanem, Khalil Kharrat, Virginie Lafage, Gaby Kreichati, Ayman Assi
1. Laboratory of Biomechanics and Medical Imaging, Faculty of Medicine, University of Saint-Joseph, Beirut, Lebanon; 2. Spine division, Hospital for Special Surgery, New York, USA

QF76 HOW CAN CERVICAL SAGITTAL ALIGNMENT PARAMETERS BE MEASURED ON X-RAY FILMS WHEN THE SHOULDER HIDES THE LOWER CERVICAL COLUMN?
Hitoshi Yamahata, Masanao Mori, Tadaaki Niio, Jun Sugata, Kazunori Arita
Department of Neurosurgery, Kagoshima, Japan

QF77 SURGICAL CORRECTION FOR FIXED CERVICAL KYPHOTIC DEFORMITY. INDICATIONS, TECHNIQUES AND COMPLICATIONS IN A CONSECUTIVE SERIES OF 10 PATIENTS
John Michael Duff, Lukas Bobinski, Juan Barges-Coll
University Hospital of Lausanne, Lausanne, Switzerland
**QF78**  
OPTIMAL TIMING FOR TRAUMATIC CERVICAL SPINAL CORD INJURY WITH SURGICAL DECOMPRESSIN: 10 YEARS CASES REVIEWED  
Dingjun Hao, Biao Wang, Hua Guo, Ziqi Zhu  
Honghui Hospital Xi’an Jiaotong University College of Medicine, Xi’an, China

**QF79**  
DOES CT ANGIOGRAPHY CHANGE THE MANAGEMENT OF PATIENTS WITH CERVICAL FRACTURES?  
Conor Dunn, Kimona Issa, Jeffrey Moore, Nancy Moontasri, Michael Faloon, Kumar Sinha, Ki Soo Hwang, Arash Emami  
Seton Hall University, School of Health and Medical Sciences- South Orange, United States

**QF80**  
REVISION SURGERY FOR CERVICAL CHORDOMAS IN PEDIATRIC PATIENTS  
Dezsoe Jeszenszky, Markus Loibl, Peter Obid, Christoph Heyde, Daniel Haschtmann, Frank Kleinstueck, Tamas F Fekete  
Schulthess Clinic, Spine Center, Zürich, Switzerland

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

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**15:50 – 17:00**  
New Techniques, Medical Economics  
Plenary Hall  
Chairs: Ibrahim Obeid, Bordeaux, France; Pedro Berjano, Milan, Italy

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ALTERATION OF BRAIN NEURAL NETWORK IN CERVICAL SPONDYLOTIC MYELOPATHY USING RESTING-STATE FUNCTIONAL CONNECTIVITY MRI  
Eiji Takasawa, Yasunori Sorimachi, Yoichi lizuka, Haku lizuka, Hirotaka Chikuda  
Japanese Red Cross Maebashi Hospital, Gunma University School of Medicine, Dept of Orthopaedic and Spine Surgery, Maebashi, Japan

69  
REOPERATION RATE REDUCTION BY USE OF AN ANULAR CLOSURE DEVICE: 90-DAY RESULTS FROM A RANDOMIZED CONTROLLED CLINICAL TRIAL IN HIGH-RISK DISC HERNIATION PATIENTS  
Claudius Thome, Frederic Martens, Gert Bouma, Adisa Kursumovic, Anular Closure RCT Study Group, Peter Douglas Klassen  
Dept. of Neurosurgery, Medical University Innsbruck, Innsbruck, Austria

70  
DOES SCREW MATERIAL AND AUGMENTATION AFFECT PEDICLE SCREW LOOSENING?  
Richard A. Lindtner, Werner Schmoelz, Marko Konschake, Thomas Nydegger, Rene Schmid  
Department of Trauma Surgery, Medical University of Innsbruck, Innsbruck, Austria

71  
DEVELOPMENT AND VALIDATION OF A STRATIFICATION SCHEME FOR SURGICAL CARE OF SPINAL DISORDERS AS A GUIDE FOR IMPROVED RESOURCE UTILISATION IN UNDERSERVED AREAS OF THE WORLD: A DELPHI STUDY  
Emre Acaroglu, Tiro Mmopelwa, Selcen Yuksel, Selim Ayhan, Margareta Nordin, Kristi Randhawa, Scott Haldeman  
ARTES Spine Center, Ankara, Turkey

72  
A NOVEL SURGICAL LATERAL APPROACH AVOIDING PSOAS DIVARICATION AND IN PRONE POSITION: TECHNIQUE AND SURGICAL COMPLICATIONS  
Luca Antonelli, Maria De Luca  
Dept of Orthopaedic Surgery, Ravenna, Italy
73 INCIDENCE OF LUMBAR PLEXOPATHY UTILIZING MECHANOMYOGRAPHY FOR TRANSPSOAS LATERAL INTERBODY FUSION
David Briski, Brandon Cook, Bradford Waddell, Joseph Zavatsky
Ochsner Medical Center, New Orleans, LA
Spine and Scoliosis Specialists, Tampa, FL, USA

74 RADIOGRAPHIC COMPARISON OF PATIENT-SPECIFIC (PS) AND MANUALLY CONTOURED CONVENTIONAL (C) RODS IN ADOLESCENT IDIOPATHIC SCOLIOSIS (AIS) SURGERY
Pouya Alijanipour, Michael J. Heffeman, Nicholas K. Baldwin, Andrew G. King
Orthopedic Pediatric Spine Surgery, Children’s Hospital of New Orleans, Louisiana State University Health Sciences Center, New Orleans, USA

75 NON-FUSION GROWTH MODULATION WITH ANTERIOR VERTEBRAL BODY TETHERING FOR ADOLESCENT IDIOPATHIC SCOLIOSIS: A PROMISING MINIMAL INVASIVE ALTERNATIVE TO TRADITIONAL TREATMENT.
Barbaros Omer Cebeci, Nuray Sogunmez, Gokhan Ergene, Binnaz Ay, Caglar Ylgor, Ahmet Alanay
School of Medicine, Acibadem University, Istanbul, Turkey

17:00 ADJOURN – END