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Please set-up your poster on Sunday, May 25 as from 14.00 and remove it on Saturday, May 31 from 10.30 to 13.00. After 13.00 the remaining posters will be removed by the conference staff. In this case no guarantee can be given that you still can recover your poster.

Poster Size: The maximum poster size is **height 160 cm and width 90 cm**

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Spinal Unit, Orthopaedic Department, London, United Kingdom*
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Clinica Santa Lucia, Neurocirurgia, Rio de Janeiro - RJ, Brazil*
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- P259** THE CHANGE OF STRESS SHIELDING IN THE BONE-IMPLANT INTERFACE BEFORE AND AFTER FUSION USING FINITE ELEMENT MODEL
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C. Neidlinger-Wilke, Z. Buser, A. Liedert, C. Rinkler, W. Käfer, L. Claes, A. Ignatius
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R. J. Oakland, N. R. Furtado, R. K. Wilcox, J. Timothy, R. M. Hall
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- P265** BIOMECHANICAL ANALYSIS OF A DISC PROSTHESIS DISTAL TO A SCOLIOSIS MODEL
M. Quirno, B. Yaszay, A. Valdevit, J. R. Kamerlink, M. Kang, N. Duncan, O. Boachie-Adjei, T. Errico, B. Lonner
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Yong Loo Lin School of Medicine, National University of Singapore, Department of Orthopedic Surgery, Singapore, Singapore
- P267** EFFECTIVENESS OF CALCIUM PHOSPHATE AND PMMA VERTEBROPLASTY CEMENTS FOR AUGMENTATION OF TRAUMATIC SPINAL FRACTURES: AN IN-VITRO STATIC BIOMECHANICAL STUDY
S. Rehman, N. Furtado, R. Wilcox, R. Hall
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A. Rohlmann, F. Graichen, A. Bender, G. Bergmann
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- P269** BIOMECHANICAL EVALUATION OF DIFFERENT ASYMMETRIC POSTERIOR STABILIZATION METHODS FOR MINIMALLY INVASIVE TRANSFORAMINAL LUMBAR INTERBODY FUSION
P. Schleicher, P. Beth, A. Ottenbacher, M. Scholz, K. Schnake, R. Pflugmacher, F. Kandziora
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- P270** INTERACTION BETWEEN FINITE HELICAL AXES AND FACET JOINT FORCES OF A SPINAL SEGMENT UNDER COMBINED LOADING
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- P271** A BIOCHEMICAL/ BIOPHYSICAL INTERVERTEBRAL DISC MODEL
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- P272** BIOMECHANICAL EVALUATION OF A MODIFIED CONSTRUCT IN TRANSFORAMINAL LUMBAR INTERBODY FUSION
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- P273** SPINE STABILITY IS COMPROMISED AFTER CYCLIC FLEXION
M. Solomonow, Y. Lu, B. Zhou, V. Patel, D. Solomonow, J. Youssef
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- P274** ANALYSIS OF STABILITY IN BURST FRACTURES WITH POSTERIOR INSTRUMENTATION SYSTEM
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- P275** A PORCINE MODEL FOR PROGRESSIVE SCOLIOTIC DEFORMITY
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- P276** QUALITY OF LIFE IN PATIENTS TREATED SURGICALLY FOR SCOLIOSIS -LONGER THAN 15 YEARS FOLLOW-UP
K. Takayama, H. Nakamura, H. Terai, T. Tsujio, A. Matsumura, H. Matsuda, K. Takaoka
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H. Barreto Henriksson, T. Svensson, M. Jonsson, M. Hagman, A. Lindahl, H. Brisby
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- P278** DIFFERENCES IN MATRIX SYNTHESIS BETWEEN PRIMARY TO FOUR PASSAGES BOVINE IVD CELLS IN A 3D MODEL
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- P279** INTERVERTEBRAL DISC DEGENERATION AFFECTS VERTEBRAL CORTICAL STRAINS AND DISC STIFFNESS
J. Costi, R. Stanley, L. Smith, H. Tettis, H. Tsangari, T. Hearn, N. Fazzalari
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- P280** TGF-BETA3 AND THREE-DIMENSIONAL CULTURE FAVOR INDUCTION OF A DISC-LIKE PHENOTYPE IN HUMAN ADIPOSE-DERIVED MESENCHYMAL STEM CELLS
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- P281** EFFECT OF LIMITED NUTRITION ON INTERVERTEBRAL DISC CELLS UNDER "PHYSIOLOGICAL" LOADING
S. Jünger, B. Gantenbein-Ritter, M. Alini, S. J. Ferguson, K. Ito
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- P282** EFFECT OF IL-1 RECEPTOR ANTAGONIST AND SOLUBLE TNF RECEPTOR ON THE ANABOLISM OF HUMAN INTERVERTEBRAL DISC CELLS
K. Kakutani, A. Kanaji, K. Asanuma, R. Pichika, H. An, M. Doita, K. Masuda
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- P283** ESTROGEN REGULATES TYPE II COLLAGEN GENE EXPRESSION VIA ER--DEPENDENT GENOMIC ACTIONS IN RAT INTERVERTEBRAL DISC CELLS
M. Kato, H. Takaishi, J. Takito, T. Kimura, M. Matsumoto, Y. Toyama, K. Chiba
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- P284** ANALYSIS OF CORRECTION LOSS AFTER PEDICLE SUBTRACTION OSTEOMY IN PATIENTS WITH SAGITTAL IMBALANCE-RADIOLOGIC ASPECTS
W. J. Kim, J. W. Kang, H. I. Sung, K. Y. Park, J. K. Park, W. S. Choy
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- P285** MICROVASCULAR SYSTEM OF CARTILAGE CANAL AND VASCULAR BUDS IN THE VERTEBRAL END PLATE
S. Kobayashi, K. Takeno, T. Miyazaki, T. Yayama, K. Uchida, A. Meir, H. Baba
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- P286** EXTRADISCAL PLACEMENT OF ALLOGRAFT CHONDROCYTES ON SPINAL NERVE ROOTS IN RATS
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- P287** THORACIC SYMPTOMS AND ASSOCIATED MRI FINDINGS IN MEN
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- P288** TNF-ALFA-MEDIATED NF-KAPPAB SIGNALLING RESERVES AGE RELATED DECLINES IN VEGF INDUCTION AND ANGIOGENESIS IN INTERVERTEBRAL DISC TISSUES
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- P289** ENGINEERING THE MATRIX METABOLISM OF INTERVERTEBRAL DISC CELLS USING RNA INTERFERENCE
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- P290** HIGH RESOLUTION T2 MAPPING OF THE INTERVERTEBRAL DISC: A POTENTIAL BIOMARKER
H. Smith, G. Anderson, T. Albert, A. Vaccaro, A. Hilibrand, Y. Zhang, C. Collins
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- P291** TAKA AND P75NTR IMMUNOREACTIVE SENSORY DRG NEURONS INNERVATING THE LUMBAR INTERVERTEBRAL DISCS IN RATS
A. Sugiura, S. Ohtori, M. Yamashita, G. Inoue, K. Yamauchi, T. Koshi, K. Takahashi
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- P292** P75NTR SAPORIN DECREASES CGRP IMMUNOREACTIVE SENSORY DRG NEURONS INNERVATING THE LUMBAR INTERVERTEBRAL DISCS IN RATS
A. Sugiura, S. Ohtori, M. Yamashita, G. Inoue, K. Yamauchi, T. Koshi, K. Takahashi
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- P293** MICROARRAY GENE PROFILING OF HUMAN NUCLEUS PULPOSUS CELLS EXPOSED TO TNF-ALPHA: UPREGULATION OF NOVEL CYTOKINE AND APOPTOTIC GENES
N. Vo, C. Seidel, G. Sowa, R. Studer, P. Coelho, K. Bell, J. Kang
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- P294** THE EFFECT OF RUNNING EXERCISE ON INTERVERTEBRAL DISC EXTRACELLULAR MATRIX PRODUCTION IN A RAT MODEL
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- P295** MMP-3 GENE EXPRESSION OF STATIC COMPRESSION INDUCED DISC DEGENERATION MODEL IN VIVO
T. Yurube, K. Nishida, S. Kaneyama, K. Maeno, T. Shimomura, M. Doita, M. Kurosaka
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- P296** THE LONGITUDINAL STUDY OF DEGENERATIVE CHANGE IN THE LUMBAR SPINE
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ISSLS - HNP

- P297** CONTRALATERAL NEUROPATHIC PAIN ASSOCIATED WITH HEMILATERAL NERVE INJURY IN RATS AN EXPERIMENTAL STUDY ON SPINAL CORD
S. Hatashita, M. Sekiguchi, S-I Konno, S-I Kikuchi
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- P299** PARTICIPATION OF 5-HYDROXYTRYPTAMINE IN PAIN-RELATED BEHAVIOR INDUCED BY NUCLEUS PULPOSUS APPLIED ON THE NERVE ROOT IN RATS
K. Kato, S-I Kikuchi, S-I Konno, M. Sekiguchi
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- P300** 5-HT2A RECEPTOR ANTAGONIST ATTENUATES PAIN-RELATED BEHAVIOR IN A RAT LUMBAR DISC HERNIATION MODEL
K. Kato, S-I Kikuchi, S-I Konno, M. Sekiguchi
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- P301** PERSISTENT EXPRESSION OF FOS-LIKE IMMUNOREACTIVITY IN THE LUMBAR SPINAL CORD AFTER EPIDURAL APPLICATION OF NUCLEUS PULPOSUS
S-I Konno, M. Hamba, I. Arai, M. Sekiguchi, K-I Otoshi, S-I Kikuchi
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- P302** THE EFFICACY OF INFlixIMAB FOR SCIATICA DUE TO DISC HERNIATIONS LOCATED AT L3-4 OR L4-5. A SMALL-SCALE RANDOMISED CONTROLLED TRIAL
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- P303** NEURONAL DAMAGE AND ACTIVATION OF GLIAL CELLS IN THE DORSAL ROOT GANGLION AFTER APPLICATION OF AUTOLOGOUS NUCLEUS PULPOSUS IN RATS
K-I Otoshi, S-I Kikuchi, S-I Konno, M. Sekiguchi
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- P304** MACROPHAGE INFILTRATION INTO THE DISC INDUCES IL-6 EXPRESSION AND CORRELATES WITH MECHANICAL HYPERALGESIA IN THE HERNIATED DISC MODEL
T. Takada, K. Nishida, T. Shimomura, K. Maeno, M. Doita, M. Kurosaka
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- P305** INCREASE OF SODIUM CHANNELS (NAV1.8 AND NAV1.9) IN IMMUNOREACTIVE NEURONS IN RAT DORSAL ROOT GANGLION EXPOSED TO AUTOLOGOUS NUCLEUS PULPOSUS
K. Watanabe, K. Larsson, B. Rydevik, S-I Kikuchi, C. Nordborg, K. Olmarker
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- P306** NERVE GROWTH FACTOR AND TNF-ALPHA OF HUMAN DEGENERATIVE INTERVERTEBRAL DISC CELLS WERE PROMOTED NERVE INGROWTH AND ACTIVATED SUBSTANCE P IN VITRO
K. Yamauchi, S. Ohtori; K. Nakagawa; T. Koshi; M. Yamashita; M. Suzuki, T. Yamashita; K. Takahashi
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- P307** DOES THE SHAPE OF THE L5 VERTEBRAL BODY DEPEND ON THE HEIGHT OF CT SLICES IN THE PEDICLE?: EVALUATION OF THE SHAPE OF THE L5 VERTEBRAL BODY WITH A MULTICUT CT SCAN
M. Alfonso, P. Palacio, G. Bastarrika, C. Villas
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- P308** USEFULNESS OF COMBINATION OF SPN-SNAP AND THREE-DIMENSIONAL MAGNETIC RESONANCE IMAGING FOR DIAGNOSIS OF FORAMINAL AND EXTRAFORAMINAL STENOSIS
T. Endo, M. Yoshida, M. Ando, H. Yamada, A. Minamide, Y. Nakagawa, H. Iwasaki
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- P309** CONTRAST ENHANCED 3T MRA OF LUMBAR SEGMENTAL VESSELS IN PATIENTS WITH DEGENERATIVE DISC DISEASE VS NORMAL CONTROLS
V. Gardner, S. Bahri, T. Muftuler, J. Tehranzadeh, J. Deckey, G. Carlson, A. Hasso
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- P310** VERTEBRAL BODY CONTRAST-ENHANCED DYNAMIC PERFUSION: COMPARISON OF NORMAL CONTROLS AND PATIENTS WITH DEGENERATIVE DISC DISEASE AND LUMBAR SEGMENTAL ARTERY STENOSIS
V. Gardner, S. Bahri, T. Muftuler, H. Yu, J. Deckey, G. Carlson, A. Hasso
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- P311** RELATIONSHIP OF ISOLATED MODIC TYPE 1 CHANGE WITH DISC DEGENERATION A PROSPECTIVE MRI STUDY
M. Grönblad, K. Luoma, T. Vehmas, E. Käpä, L. Kerttula
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- P312** DEEP VENOUS THROMBOSIS AND PULMONALY THROMBOEMBOLISM AFTER SPINE SURGERY
H. Hirabayashi, J. Takahashi, H. Hashidate, N. Ogiwara, H. Kato
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- P313** REPRODUCIBILITY OF VERTEBRAL ENDPLATE SIGNAL (MODIC) CHANGES IN THE LUMBAR SPINE
T. S. Jensen, J. Solgaard Sorensen, P. Kjaer
The Back Research Center, part of Clinical Locomotion Science, University of Southern Denmark, Ringe, Denmark
- P314** MORPHOMETRIC ANALYSIS OF THE INTERVERTEBRAL FORAMEN IN DEGENERATIVE LUMBAR SCOLIOSIS BY MULTIDETECTOR-ROW COMPUTED TOMOGRAPHY
Y. Kaneko, H. Takaishi, M. Matsumoto, Y. Nishiwaki, S. Momoshima, Y. Toyama, K. Chiba
Keio University, Orthopaedic Surgery, Shinjuku, Japan
- P315** DEVELOPMENT OF A CLINICAL DIAGNOSIS SUPPORT TOOL TO IDENTIFY PATIENTS WITH LUMBAR SPINAL STENOSIS
S-I Konno, Y. Hayashino, S-I Fukuhara, M. Sekiguchi, S-I Kikuchi
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- P316** ZYGOAPOPHYSEAL FACET ASYMMETRY IN CHILDREN AND ITS POSSIBLE RELATIONSHIP WITH DAILY ACTIVITIES
Y. Masharawi, Y. Mirovsky, K. Salame, H. B. Albert, B. Medlej, S. Peled, I. Hershkovitz
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- P317** CT ANALYSIS OF PEDICLE SCREW PLACEMENT PRESENTS ONLY MODERATE INTER-OBSERVER AGREEMENT
S. Mendoza-Lattes, A. Weiss, M. Chang, Y. Gao
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- P318** HIP-SPINE SYNDROME (COMPLEX, MISDIAGNOSED): INCLUDING OVERDIAGNOSED SPINE DISEASES AND UNDERDIAGNOSED HIP OSTEOARTHRITIS
T. Morimoto, T. Hotokebuchi
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- P319** ROTATIONAL INSTABILITY OF WEDGING DISC USING KINETIC CT
S. Ohtori, T. Koshi, M. Yamashita, K. Yamauchi, S. Munetaka, M. Mimura, K. Takahashi
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- P320** THE RELIABILITY OF CT AND MRI GRADING OF LUMBAR FACET ARTHROPATHY IN TDR PATIENTS
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- P321** A COMPARISON STUDY OF DROP FOOT BETWEEN LUMBAR SPINAL DISORDERS AND COMMON PERONEAL NEUROPATHY TO FIND DISTINGUISHING CATEGORIES
Y. Sekiguchi, S-I Kikuchi, S-I Konno, M. Sekiguchi
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- P322** INTRA-ARTICULAR HIP PATHOLOGY DIAGNOSED BY MR ARTHROGRAPHY IN PATIENTS PRESENTING TO A SPINE SURGERY CLINIC WITH LOW BACK PAIN
J. Sembrano, D. Polly
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- P323** CAN DISCOGRAM PREDICT CLINICAL OUTCOME OF FUSION FOR DEGENERATIVE LOW BACK PAIN?
D. Sengupta, S. Behari, R. Singh
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- P324** MODIC CHANGES IN A JAPANESE ORTHOPEDICS OUTPATIENTS AND ITS CORRELATION TO THE LOW BACK PAIN
K. Shinoda, Y. Aota, M. Uesugi, K. Ishida, K. Mizuma, T. Saito
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- P325** THE PHYSICAL EXAMINATION IS MORE SENSITIVE THAN THE DIAGNOSTIC INJECTION IN DIAGNOSING SURGICAL LEVEL SACROILIAC PAIN
J. Stark, C. Idemilli, C. Meyer
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- P326** THE VALIDITY OF FLUORIODEOXYGLUCOSE POSITRON EMISSION TOMOGRAPHY FOR DIAGNOSIS OF PYOGENIC SPONDYLITIS IN THE LUMBAR SPINE
M. Suzuki, T. Koshi, S. Ohtori, M. Yamashita, K. Yamauchi, S. Orita, K. Takahashi
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- P327** PREVALENCE OF DEGENERATIVE IMAGING FINDING IN LUMBAR MAGNETIC RESONANCE IMAGING AMONG YOUNG ADULTS
J. Takatalo, J. Karppinen, J. Niinimäki, S. Taimela, S. Näyhä, E. Kyllönen, O. Tervonen
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ISSLS – LOW BACK PAIN

- P328** SACROILITIS AS CAUSE OF FAILED BACK SYNDROME IN PATIENTS WITH PERSISTENT BACK PAIN AFTER SPINAL FUSION
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- P329** SITTING POSTURES AT WORK ARE ASSOCIATED WITH CURRENT AND FUTURE LBP
J. Bell, K. Burton, M. Stigant
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- P330** SURGEON CONCERNS REGARDING LUMBAR TOTAL DISK REPLACEMENT (TDR)
C. Bono, J. Harrop, D. Brodke, K. D. Riew, A. Hilibrand, A. Vaccaro
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- P331** CORONAL PLANE DEFORMITY AFTER TWO-LEVEL LUMBAR DISC REPLACEMENT
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- P332** EFFICACY AND SAFETY OF PERCUTANEOUS VERTEBROPLASTY FOR VERTEBRAL INSUFFICIENCY FRACTURES IN NON AGENERIANS
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- P333** SAFETY AND EFFICACY OF PERCUTANEOUS SACROPLASTY FOR SACRAL INSUFFICIENCY FRACTURES
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- P334** WORK ORGANIZATION EXPOSURES AND RISK OF LOW BACK PAIN
A CASE CONTROL STUDY
R. Hiebert, P. Landsbergis, K. Gurnitz, J. Dropkin, M. Adamu
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- P335** APPLICATION OF SURFACE ELECTROMYOGRAPHY IN LOW BACK PAIN ASSESSMENT
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- P336** TRUNK SURFACE EMG DURING SUDDEN LOAD RELEASE FOR ASSESSMENT OF MUSCLE FATIGABILITY
Y. Hu, D. Chow, K. Luk
The University of Hong Kong, Dept of Orthopaedics and Traumatology, Hong Kong, Hong Kong
- P337** A NATIONWIDE OUTPATIENT BASED SURVEY OF SPINAL PAIN IN KOREA
IMPACTS OF THE SPINAL PAIN ON THEIR LIVES AND TRENDS IN ITS MANAGEMENT
J. Hyok Kim, M. Whan Ahn, J. Lee
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- P338** COCULTURE OF INTERVERTEBRAL DISC ANNULUS FIBROSUS CELLS AND ACTIVATED MACROPHAGE-LIKE THP-1 CELLS GREATLY ENHANCED PRODUCTION OF INFLAMMATORY CYTOKINES AND VASCULAR ENDOTHELIAL GROWTH FACTOR
J. Han Kim, R. Studer, N. Vo, G. Sowa, H. Georgescu, H. Yeon Seo, J. Kang
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- P339** AUGMENTED CEREBRAL ACTIVATION BY LUMBAR MECHANICAL STIMULUS IN CHRONIC LOW BACK PAIN PATIENTS - A FUNCTIONAL MAGNETIC RESONANCE IMAGING STUDY
Y. Kobayashi, J. Kurata, M. Kokubun, T. Akaishizawa, M. Sekiguchi, S-I Konno, S-I Kikuchi
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- P340** MAGNETIC RESONANCE IMAGING AND CHRONIC LOW BACK PAIN IN PATIENTS WITH DEGENERATIVE LUMBAR SCOLIOSIS
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- P341** TRUNK MUSCLE PERFORMANCE IN PATIENTS WITH LUMBAR DISC HERNIATION VERSUS SPINAL CANAL STENOSIS
J. Omata, M. Kanayama, D. Togawa, T. Hashimoto, K. Shigenobu, F. Oha, K. Kaneda
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- P342** RANDOMISED CONTROLLED TRIAL COMPARING DIFFERENT METHODS OF LBP PATIENT INFORMATION IN A SPECIALISED SETTING WITH THE ITALIAN VERSION OF THE BACK BOOK
G. Zanoli, A. Targa, L. Mandrioli, B. Pasello, T. Pastorelli, S. Cavazza, N. Basaglia
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University of California, San Francisco, Orthopaedic Surgery, San Francisco, United States

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- P352** LONG TERM EFFECT OF THE INTERVERTEBRAL DYNAMIC STABILIZATION AS A PROTECTIVE TECHNIQUE FOR ADJACENT LEVELS
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Tohoku University School of Medicine, Department of Orthopaedic Surgery, Sendai, Japan
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- P369** SURGICAL OUTCOME OF DROP FOOT ASSOCIATED WITH LUMBAR SPINAL STENOSIS
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- P370** HIGH URINARY 5-HYDROXY INDORE ACETIC ACID LEVELS AS A MARKER FOR SEROTONERGIC SYSTEM WERE OBSERVED IN PATIENTS WITH LUBAR SPINAL STENOSIS. A PROSPECTIVE STUDY
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- P372** THE DYNAMICS OF THE EPIDURAL FAT IN SPINAL STENOSIS
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D. K. Ahn, D. J. Choi, S. Lee
Seoul Sacred Heart General Hospital, Orthopaedic surgery, Seoul, South Korea
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- P386** A NEW MINIMAL ACCESS TECHNIQUE FOR LUMBAR INTERBODY FUSION
M. Kawakami, S. Tsutsui, T. Nakane
Wakayama Medical University Kihoku Hospital, Spine Center and Orthopaedic Surgery, Japan
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Y. Kim, K. Ha
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- P389** PATIENT'S EVALUATION OF A REHABILITATION PROGRAMME FOLLOWING SPINAL SURGERY
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- P390** PATIENT'S EVALUATION OF AN EDUCATIONAL BOOKLET FOLLOWING SPINAL SURGERY
A. McGregor, J. Toschke, J. Deane
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J-S Lee, K-W Kim, K-Y Ha
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Hokkaido University Graduate School of Medicine, Orthopedic Surgery, Sapporo, Japan
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Pro Spine, Straubing, Germany
- P420** FUNCTIONAL DYNAMIC STABILIZATION IN LUMBAR SPINAL STENOSIS WITH COFLEX® INTERSPINEOUS – 2-YEAR RESULTS
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Texas Back Institute, Plano, TX, United States
- P422** HYBRID DYNAMIC STABILIZATION WITH POSTERIOR SPINAL FUSION IN THE LUMBAR SPINE - 2 YEAR FOLLOW-UP
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A. Durrani, A.H. Crawford
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A. Durrani, A.H Crawford
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A. Durrani, A.H. Crawford, C. Dahia, C. Wylie
Children Hospital Medical Center, Cincinnati, Ohio, USA, Orthopedic Surgery, Cincinnati, OH, United States
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- P427** DOES DEGENERATIVE SPONDYLOLISTHESIS PLAY A ROLE INPRODUCING CERVICAL SPONDYLOTIC MYELOPATHY IN THE ELDERLY?
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T-A Jahng, H-J Kim
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- P429** OZONE DISCECTOMY (OZONUCLEOLYSIS) FOR DISCOGENIC RADICULOPATHY ARISING FROM DISC HERNIATION: ONE YEAR FOLLOW-UP STUDY FROM INDIAN AND SPANISH CENTRES
J. Baeza-Noci, Kumar Vijay
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