# 10th Interdisciplinary World Congress on Low Back and Pelvic Girdle Pain

APPLYING THE EVIDENCE TO REDUCE DISABILITY

Flanders Meeting & Convention Center Antwerp – Belgium

28-10~31-10 // 2019



# Program Sunday October 27, 2019

17.30 - 18.30	Pre-Registration
17.30 - 18.30	Welcome Reception

# Program Monday October 28, 2019

07.30	Registration
08.20	Welcome Andry Vleeming, Lieven Danneels

# Anatomy and Biomechanics: New insights into determinants and effects of mechanical load on the back

Moderators: Jaap van Dieën & Andry Vleeming

08.25	Introduction  Jaap van Dieën
08.30	Back loading and disc health Theo Smit
08.50	Back loading and back pain-What do we know about it? And what can we do with it? Pieter Coenen
09.10	Can low-back loading be optimized to maintain or improve intervertebral disc health and prevent low-back pain?  Jaap van Dieën

09.30	How do thoracolumbar fascia and intra-abdominal pressure affect the mechanical loading of the low-back?  Mark Driscoll
09.50	Relationships between trunk muscle activation and thoraco-lumbar kinematics in direction-related non-specific chronic low back pain subgroups during a sagittal bending task Rebecca Hemming
10.00	Subgrouping children and adolescents with non-specific chronic low back pain: preliminary multifactor cluster analysis based on psychosocial, biomechanical and physical parameters  Anne Tabard Fougère
10.10	Dynamic lumbar intervertebral motion sharing in back pain patients and controls Alan Breen
10.20	Discussion
10.35	Morning break
	Control: Integration with modern pain neuroscience and making it work rator: Paul Hodges
11.05	Introduction Paul Hodges
11.10	Differentiating pain mechanisms based on modern pain neuroscience Ruth Chimenti
11.30	Matching management to pain mechanisms Paul Hodges
11.50	Motor control and different pain mechanism groups  Anneleen Malfliet
12.10	Efficacy of management movement impairments  Linda van Dillen
12.30	Title to be confirmed  Jason Kutch
12.50	Discussion
13.05	Lunch Break

# Surgical selection for degenerative low back pain: How helpful is the literature? In cooperation with NASS (North American Spine Society) Moderator: Todd Wetzel & Ted Dreisinger

14.05	Introduction Todd Wetzel
14.10	What constitutes "good" literature?  Max Aebi
14.30	The end of "Non-specific Low Back Pain"  Todd Wetzel
14.50	Proper non-operative care- the final word Heidi Prather
15.15	Discussion moderated by Ted Dreisinger
15.25	Afternoon Break
15.55	Does the evidence support surgery for back pain? -Szpalski
16.20	When is back pain <i>not</i> back pain? -Whang
16.35	Discussion moderated by Ted Dreisinger
16.55	Closure

# Program Tuesday October 29, 2019

Exercise interventions: Balancing between a specific and general approach *Moderator: Lieven Danneels* 

08.25	Introduction Lieven Danneels
08.30	Spinal function classification framework for non-specific low back pain: A Delphi survey of academic experts and clinicians Liba Sheeran
08.50	Effects of skill training in functional activities versus strength and flexibility exercise in people with chronic low back pain Linda van Dillen
09.10	Specific and general exercises: how and for whom?  Lieven Danneels
09.30	The evolving case supporting individualised physiotherapy for low back pain Jon Ford
09.50	Effectiveness of cognitive functional therapy compared with multidisciplinary pain rehabilitation in patients with chronic disabling low back pain Henrik Bjarke Vaegter
10.10	Title to be confirmed
10.30	Discussion
10.45	Morning Break

Connective tissue matters: The role of fascia in lumbo-pelvic pain and stability Moderators: Robert Schleip & Carla Stecco

11.15	Introduction Robert Schleip
11.20	Fascial stiffness regulation: new insights and potential impact on lumbo-pelvic stability Robert Schleip
11.40	Anatomical continuities of thoracolumbar fascia Carla Stecco

12.00	Nociceptive capacity of the thoracolumbar fascia  Andreas Schilder
12.15	Can manual therapy focus on the thoracolumbar fascia? An evidence-based ultrasonic exploration Fernández de las Penas
12.30	Lunch Break & Poster Presentations
13.30	Bilateral real time ultrasound analysis of thoracolumbar fascia during breathing, slow and fast walking Jouko Heiskanen
13.40	Self-Myofascial Release for chronic low back pain and stress: A controlled clinical trial Christopher-Marc Gordon
13.50	A pragmatic study comparing Fascial Manipulation ® and "general" physical therapy for those with low back pain related diagnoses Julie Ann Day
14.00	Discussion
14.15	End Discussion

# Parallel Session I: Anatomy

Flexion-relaxation ratio asymmetry and its relation with lateral trunk flexibility in individuals with and without chronic non-specific low back pain

Kevin Rose-Dulcina

Assessment of trunk dynamic stability during repetitive flexion-extension movements for people with and without nonspecific low back pain: the role of non-linear assessment parameters

Hamidreza Mokhtarinia

External force on the lumbar myofascial ring: effect of hypaxial muscle contraction on the lumbar spine

Mark Schuenke

Biomechanical effects of a flexible beam exoskeleton on low back loading during static bending and lifting tasks

Axel Koopman

Is there a relationship between an individual's stature, BMI and age with diurnal variation in spinal disc heights? A novel study using weight-bearing MRI Waseem Bashir

Comparison of lumbar multifidus and erector spinae muscle fiber characteristics between persons with NSCLBP and healthy controls Sioerd Stevens

Test-retest reliability and minimal detectable change of three-dimensional trunk motion parameters during a lifting task in chronic low back pain individuals Rita Fernandes

### 15.45 Afternoon Break

A pilot feasibility study - bilateral real time ultrasound analysis of thoracolumbar fascia during breathing, slow and fast walking Tuulia Luomala

The immediate efficacy of Spinomed in the posture and equilibrium in patients with hyperkyphosis and vertebral fractures

Tomislav Kranicec

Does pain reduction shortly after local injection predict response to corticosteroid injection in patients with Greater Trochanteric Pain Syndrome?

Stephane Genevay

The Watching Pregnancy Project: LBP occurrence, symptoms and healthcare use from 20-weeks' gestation until 6-weeks after delivery Sarah Liddle

Eye gaze markers indicate visual attention to threatening images in individuals with chronic back pain Zoe Franklin

17.00 Discussion and closure

# Parallel Session II: Motor Control

Osteopathic techniques on fascial system and the effects on vestibulo-ocular reflex gainsymmetry assessed by video head impulse test Daniele Origo

Variability of lumbar flexion angle during a pick up task in patients with chronic low back pain

Guillaume Christe

Age and sex specific effects in paravertebral surface electromyographic back extensor muscle fatigue in chronic low back pain Gerold Ebenbichler

Does movement matter in people with back pain? Investigating 'atypical' lumbo-pelvic kinematics in people with and without back pain using wireless movement sensors Robert Laird

Lumbar range of motion is predicted by task-specific, but not by general measures of pain-related fear in patients with chronic low back pain

Thomas Matheve

Somatosensory afferents from the lumbo-pelvic area differently influenced the control of paravertebral muscles in people with chronic low back pain Hugo Massé-Alarie

Comparing individual lumbar muscles activation between indwelling and high-density surface electromyography

Jacques Abboud

# 15.45 Afternoon Break

Clinical assessments can discriminate altered body perception in patients with unilateral chronic low back pain, but not differences between affected and unaffected side Raphael Meier

Lumbar local dynamic stability is modified after rehabilitation in chronic low back pain patients: results from a case control study Arnaud Dupeyron

The impact of psychological stress on motor control: a systematic review Timothy Doorson

Magnetic resonance imaging for the measurement of lumbar multifidus volume: protocol of a reliability study

Saskia Bosch

Application of a 3D freehand ultrasound system for the measurement of lumbar multifidus volume: protocol of a reliable study Elise Bellon

### 17.00 Discussion and closure

# Parallel session III (a): Prevention and Education

Does standard manual handling advice alter trunk muscle activity during a basic lifting task in healthy individuals? A pilot study

Valerie Sparkes

The impact of a work-based condition management program on work absence and quality of life

Lina Chauhan

Recovery from musculoskeletal complaints: A systematic synthesis of qualitative literature with considerations for policy and practice Corrie Myburgh

Association of attitudes toward chronic low back pain and evidence-based practice: a cross-sectional survey of a chiropractic institution

Katherine Pohlman

Identifying design requirements for a passive exoskeleton for low back pain patients: a focus group study

Saskia Baltrusch

Assessment of functioning and disability: development of a web-based dialogue tool for patients with low back pain (The LBP-Tool)

Charlotte Ibsen

Effect of physiotherapy versus standard medical care on pain, functional disability, kinesiophobia and pain catastrophization in adult patients with acute non-specific low back pain: systematic review and meta-analysis Linzette Moris

### 15.45 Afternoon Break

# Parallel session III (b): Sports Medicine

Effects of foam rolling with additional vibration stimulation on the characteristics of the thoracolumbar fascia

Annika Griefahn

The role of fascia and abdominal muscles in chronic pain with caesarean section Chenglei Fan

Prevalence of low back pain in elite adolescent dancers Nathalie Roussel

Different sagittal plane pelvic motion between athletes with and without low back pain during drop jump task

Hiroshi Akuzawa

Lumbar pain in dancers: differences between ballet and contemporary Justine Benoit-Piau

Comparing the effects of pelvic alignment and hip joint mobility on shoulder mobility and torque production: a randomized blinded control group study

Mohammad Reza Nourbakhsh

17.00 Discussion and closure

# Program Wednesday October 30, 2019

# A new approach to old questions Moderator: Hanne Albert Introduction 08.25 Hanne Albert Stepwise program in treating patients with Modic changes 08.30 Michiel Schepers The results of inflammation restoring treatment of acute lumbar disc herniations 08.50 Alexander Thachev and Hanne Albert Lumbar neurodynamic tests are accurate in identifying radicular pain due to disc herniation but fail in identifying foraminal stenosis 09.10 Harald Ekedahl Topographic Hybrid SPECT-CT Scan for Non-Specific Low Back Pain 09.25 Erik van de Kelft Preliminary findings from an active surveillance reporting system for spinal manipulative 09.35 therapy regulated providers and low back pain patients Martha Funabashi 09.45 **Back Break** Effectiveness and cost-effectiveness of neuromuscular exercise and back care counseling in female healthcare workers with recurrent 9.50 non-specific low back pain: A two-year follow-up of a randomized controlled trial Jaana Suni Restorative Neurostimulation for Chronic Low Back Pain: Long-Term Results

Brief intervention vs. multidisciplinary intervention in facilitating return to work in low back pain patients: results from two randomized intervention studies including 948 patients

10.05

10.20

10.35

10.45

Christopher Gilligan

with 100% follow-up Ole Kudsk Jensen

Discussion

**Morning Break** 

# Who gets Pelvic Girdle Pain, how to evaluate it? *Moderators: Britt Stuge & Annelie Gutke*

11.20	Introduction Britt Stuge
11.25	Prevalence of pregnancy-related pelvic girdle pain and its association with activity limitations among pregnant women Saadatu Maiwada
11.35	Prevalence and severity of low back- and pelvic girdle pain in pregnant Nepalese women Ranjeeta Shijagurumayum
11.45	Sacroiliac Joint Dysfunctions in Patients with Chronic Nonspecific Low Back Pain Aybike Senel
11.55	Hip radiograph findings in young, middle aged and other adults undergoing image guided sacroiliac joint injections for posterior pelvic pain Heidi Prather
12.10	Can pelvic girdle pain be predicted by muscle activation during the active straight leg raise? A comparison between pregnant and non-pregnant women Daniela Aldabe
12.20	Questions & Discussion
12.30	Lunch Break
13.30	Physical function in pregnant women with pelvic girdle pain, asymptomatic pregnant and non-pregnant women – investigating the Timed Up and Go test, kinematic and spatiotemporal characteristics during gait and the Stork test Lene Christensen
13.45	Is Transcutaneous Electric Nervous Stimulation (TENS) or acupuncture the most effective non-pharmacologic treatment strategy for women with pelvic girdle pain during pregnancy? a randomized controlled trial Annika Svahn Ekhahl
13.55	Outcomes and outcome measurements in intervention studies of pelvic girdle pain, a systematic review Francesca Wuytack
14.05	Development of a consensus-based core outcome set for pelvic girdle pain Alexandria Remus
14.15	Discussion
14.25	End Discussion and Back Break
	Movement Break

Primary Care for Low Back Pain Moderator: Maurits van Tulder & Bart Koes

14.30	Introduction Maurits van Tulder
14.35	What low back pain is and why we need to pay attention  Jan Hartvigsen
14.55	Prevention and treatment of low back pain: evidence, challenges and promising directions  Bart Koes
15.15	Afternoon Break
15.45	Low back pain: a call for action  Maurits van Tulder
16.05	Low back pain in primary care: challenges for the future Jean-François Chenot
16.25	Global Spine Care Initiative: An international and interprofessional Delphi process to develop a Model of Care for people presenting with back pain and disability Claire Johnson
16.40	Discussion
16.45	Closure

19.15 - 22.30 Gala Dinner at Horta Antwerp (Registration is mandatory)

# Parallel session IV: LUMBAR AND SACROILIAC SURGERY In conjuction with SIMEG

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08.05	Introduction Lumbar spine Bengt Sturesson
08.10	Where is the optimal position of CBT screw? Seji Otsuka
08.20	Analysis of risk factors for early adjacent segment disease who underwent revision surgery within 5 years after lumbar spinal fusion Soh Jaewan
08.30	Disc-Associated low back pain was indicated by posterior annulus fibrosus and posterior longitudinal ligament resection in percutaneous transforaminal endoscopic lumbar discectomy <i>Yuan Xue</i>
08.40	Baseline patient characteristics commonly captured before surgery do not accurately predict outcome following lumbar microdiscectomy Stijn Willems
08.50	Expanded indication and application of minimal invasive direct lateral interbody fusion (DLIF)  Jaewan Soh
09.00	Clinical and radiographic analysis of unilateral versus bilateral instrumentation in one-level lateral lumbar interbody fusion Masayoshi Fukushima
09.10	The effectiveness of transforaminal endoscopic lateral recess decompression for lumbar spinal canal stenosis  Fumitake Tezuka
09.20	Discussion
	Sacroiliac Joint
09.40	Diagnostic procedures: Introduction  Bengt Sturesson
09.50	Infiltration-test of the sacroiliac joint under OARM navigation: a feasibility study Yann Pelletier
10.00	Grading of sacroiliac arthrogram and criteria for identifying technically-easy cases when performing sacroiliac intraarticular injections  Daisuke Kurosawa
10.10	Discussion
10.20	How to measure outcome and effect? Thomas Kibsgaard

10.30	The effect of sacroiliac fusion surgery on balance control strategies in patients with sacroiliac joint dysfunction Ralph Rashbaum
10.40	Discussion
10.50	Morning Break
	Free Papers  Moderator: Thomas Kibsgaard
11.20	Quantitative evaluation of the sacroiliac joint fixation in stress reduction on both sacroiliac joint cartilage and ligaments: a finite element analysis Daisuke Kurosawa
11.30	The association between sacroiliac joint-related pain following lumbar spine surgery and spinopelvic parameters: A prospective multicenter study <i>Juichi Tonosu</i>
11.40	Triangular titanium implants for sacroiliac joint fusion Nikolai Rainov
11.50	Minimally invasive sacroiliac joint fusion: independent cohort Jean-Claude Lokietek
12.00	Clinical analysis in radiofrequency neurotomy for sacroiliac joint pain Keisuke Ito
12.10	Pitfalls during sacroiliac joint arthrodesis for patients with sacral dysmorphism induced by lumbosacral transitional vertebrae Daisuke Kurosawa
12.20	Discussion
12.30	Lunch
	Different surgical methods and techniques  Moderator: Thomas Kibsgaard
13.30	Two-year results of a randomized controlled trial comparing minimally invasive sacroiliac joint fusion vs. conservative management for sacroiliac joint pain <i>Djaya Kools</i>
13.40	Minimally invasive sacroiliac joint fusion using a novel hydroxyapatite-coated screw: two-year clinical and radiographic outcomes Louis Rappoport
13.50	Clinical, radiological outcome and complications of computer navigated minimal invasive postero-medial sacro-iliac joint fusion using a threaded bolt system <i>Khai Lam</i>
14.00	Distraction arthrodesis of the sacroiliac joint: 2-year results of a descriptive prospective multi-center cohort study in 171 patients Volker Fuchs
14.10	Discussion

# 14.30 Afternoon Break Three-minute Poster Presentations 15.00 Moderator: Bengt Sturesson The significant risk indicators for sacroiliac joint arthrodesis in patients with sacroiliac joint pain Daisuke Kurosawa Minimal invasive SI joint fusion: from the ODI to the PASS. A retrospective analysis of a prospective case series Leo Massari Treatment of pain originating from the iliolumbar ligament combined with sacroiliac joint disorder: report of two cases Tomoya Takahashi Classification and clinical characterization of pathologies for sacroiliac joint dysfunction Jyoji Shin The conformity of the painful sacroiliac joints using a best-fit algorism for CT-based bone models Kazuya Ito No difference in the distribution patterns of the mineralization in the subchondral bone underneath the auricular surface in patients with severe sacroiliac joint pain Tsuyoshi Morito No increase in the mineralization of the subchondral bone of the sacroiliac joint in patients with severe unilateral sacroiliac joint pain Tsuyoshi Morito Minimally invasive sacroiliac joint fusion using a novel hydroxyapatite-coated screw system improves functional outcomes in patients with sacroilitis at one-year follow-up Charles Ledonio Endoscopic electrothermic (ESIJ) procedure of the sacroiliac joint 24-month follow up studies Richard Ibrahim 15.50 Round Table Discussion and Brainstorming 16.30 Closure

19.15 - 22.30

Gala Dinner at Horta Antwerp (Registration is mandatory)

16.35 **SIMEG MEMBERS MEETING** 

# **Program Thursday October 31, 2019**

# Parallel Session V(a): Pelvic Girdle Pain

08.30

Introduction Britt Stuge

Sacroiliac joint dysfunction as the major cause of chronic low back pain Clarence Nicodemus

Revisiting sacroiliac joint biomechanics – An in-vitro study *Niels Hammer* 

Ultrasound study of posterior sacroiliac ligaments in patients with chronic low back sacral pain

Plamen Todorov

Scintigraphic evaluation of uptake in the long dorsal sacroiliac ligament (LDSIL) in the diagnosis of mechanical dysfunction of the sacroiliac joint (SIJ Incompetence) *Jennifer Saunders* 

Pelvic girdle pain, not only in women! Samantha Siegers

Anatomical landmarks of the intra-pelvic side-wall as sources of pain in women with and without pelvic girdle pain persisting after childbirth

Thomas Torstensson

Innominate mobility is associated with level of abdominal muscle activity during the ASLR in healthy individuals

Melanie Bussey

# Back break 5 mins

Contraction of the transverse abdominal muscle in pelvic girdle pain is enhanced by pain provocation during the task

Jan Mens

Psychosocial and behavioural characteristics in women with persistent pelvic girdle pain 12 years postpartum

Cecilia Bergström

Spontaneous recovery from self-reported pelvic pain the first 6 weeks after delivery: a prospective longitudinal SMS-based study

Anne Marie Gausel

Discussion

#### 10.30 Morning Break

# Parallel Session VI: Epidemiology

#### 11.00 Introduction

Fear avoidance beliefs affect physical activity in patients with lumbar spinal stenosis Masakazu Minetama

Association between sarcopenia and low back pain in patients with lumbar spinal stenosis Sachika Matsuo

An individual participant data meta-analysis of spinal manipulative therapy for chronic low back pain

Annemarie de Zoete

Reliability of physical functioning tests in patients with low back pain: a systematic review Lenie Denteneer

Complier-average causal effect (CACE) analysis of the paracetamol in acute low back pain (PACE) trial

Marco Schreijenberg

Imaging versus no imaging for low back pain: a systematic review, measuring costs, healthcare utilization and absence from work Giis Lemmers

Back pain rehabilitation related changes in automatically predicted ICF activity and participation categories

Thomas Kienbacher

Is one screening tool enough to identify the diverse spectrum of behavioral factors that may influence a poor outcome in musculoskeletal pain?

Sean Gibbons

Are respiratory disorders risk factors for troublesome low-back pain? A study of a general population cohort in Sweden

Eva Rasmussen Barr

### 12.35 Lunch Break

The IMPACT of a referral algorithm for axial spondyloarthritis in chronic low back pain patients: four month follow-up in patient reported outcomes *Maha Jamal* 

Complications, reoperations, readmissions, and length of hospital stay in 34,639 surgical cases of lumbar disc herniation Olaf Field

Inter-tester and intra-tester reliability studies: the evidence-based methodology has failed the evidence-based understanding

Jo Abbott

Discussion

# Parallel Session VII: Exercise

#### 08.30 Start time

Does the performance of five back-associated exercises relate to the presence of LBP? A cross-sectional observational investigation in regional Australian council workers Charles Philip Gabel

Effectiveness of epidural amniotic fluid injection for low back pain Glenn Buttermann

Somato-sensory trainings with new technologies are promising treatments in patients with chronic spinal pain or fibromyalgia *Christophe Demoulin* 

Exercise and breath holding intervention for individuals with dysfunctional breathing; a matched controlled trial Kyle Kiesel

Effect of elastic therapeutic taping of abdominal muscle endurance in patients with chronic non-specific low back pain: a randomized, controlled, single-blind, crossover trial *Mohammadreza Pourahmadi* 

Neuromuscular exercise reduces low back pain intensity, improves lumbar movement control and physical functioning in nursing duties among female healthcare workers: a randomized controlled trial

Annika Taulaniemi

Safe exercises for adults with scoliosis: a scoping review with proposed algorithm Lise Stolze

# Back break 5 mins

Getting patients back in action; reducing disability and continuing activity after a goal orientated back group: a cost-effective model Ruth Newsome

A change of rehabilitation model increases work capacity at 12 months in low back pain *Michael Norberg* 

Virtual reality induced analgesia during exercises in patients with chronic low back pain: a randomized controlled trial

Thomas Matheve

Discussion

#### 10.30 | Morning Break

Caregiver and patient perspectives on perioperative rehabilitation in lumbar arthrodesis patients: a qualitative study

Michael Bultheel

A study to determine the effectiveness of pilates exercises on pain and function in people with chronic low back pain

Jane Collins

Accelerometer-based facilitated walking program in addition to usual care for the management of patients with low back pain at medium or high risk of chronicity: a randomised controlled trial

Hosam Alzahrani

Predictors for isometric back/abdominal muscle strength and exercise capacity in persons with chronic non-specific low back pain Jonas Verbrugghe

Effects of Exercise therapy in patients with acute low back pain: a systematic overview of systematic reviews

Marc Karlsson

Long-term follow-up of a clinical pathway for patients with non-specific chronic low back pain: a pilot study

Veerle Stevens

Comparison of two multidisciplinary rehabilitation interventions in patients with chronic low back pain: a randomized controlled clinical trial

Anne Mette Schmidt

Spinal steroids in low back pain: end plate vertebral disease as a cause Ray Suhasish

Effects of stabilization exercises on health-related quality of life in women with chronic low back pain

Maria Moussouli

# 12.35 Lunch Break

Concentrating bone marrow aspirate is mandatory to eliminate the detrimental effects of erythrocytes and increase mesenchymal stem cell levels in ortho-biological injections Peter Everts

Comparison of core strengthening exercises and general trunk exercises in patients with chronic low back pain using lumbo-pelvic stability tests and pelvic radius technique *Disha Chitalia* 

Back pain and lifestyle in female adolescent football players Eva Skillgate

Discussion

# Parallel Session VIII: Lumbar Pain

John or Mary? Which sex suffers more from low back pain when familial factors are controlled for? A cross-sectional co-twin control study *Daniel Pozzobon* 

A randomised controlled trial comparing targeted thrust manipulation with a general manipulation thrust in low back pain: a general approach is as effective as specific *Christopher McCarthy* 

Patients with chronic low back pain show severe impairments of sensorial perception and discrimination in the pain area Jorge Luís Ribas

Evaluation of dynamic postural balance in individuals with chronic lumbar pain through the Star Excursion Balance Test

Fabiana Silva

The association between lumbosacral transitional vertebra and degenerative lumbar stenosis

Janan Abbas

Fear avoidance beliefs, disability and health literacy among women with chronic low back pain

Einas Al Eisa

The risk factors of low back pain in female high-school students Pardis Noormohammadpour

Agonistic tennis in adolescence: correlation with scoliosis and low back pain, results of a cross-sectional study

Michele Romano

Negative beliefs about back pain are associated with persistent, high levels of low back disability in community-based women Bothaina Alyousef

Magnetic resonance imaging findings in the lumbar spine of adult patients with Scheuermann's disease

Leena Ristolainen

Functional brain alterations in low back pain: a systematic review of EEG studies Jessica van Oosterwijck

Impact of Tergumed therapy on isometric maximum strength in patients with lumbar arthrodesis

Didier Koch

Is adiposity associated with site-specific, musculoskeletal pain? A systematic review Donna Urquhart

### 10.35 Morning Break

Daily relative physical strain is associated with physical fitness, depressive symptoms, fear avoidance beliefs and vitality but not with pain intensity in female healthcare personnel with recurrent low back pain

Tiina Kaistila

Unstable sitting in individuals with acute low back pain: A center-of-pressure analysis *Roberto Meroni* 

Trunk strength and spinal mobility in spondyloarthritis patients Tine Willems

How is gluteal muscles morphology affected by chronic low back pain? Leila Rahnama

Clinical efficacy of calcitonin compared to diclofenac sodium in chronic non-specifc low back pain with type I Modic changes: a retrospective study

Yuan Xue

The presence of multiple MRI features is associated with poor improvement in intensity of chronic low back pain

Romain Perera

Temporal changes in lumbar stiffness and pain sensitivity following spinal manipulation in chronic low back pain patients

Casper Glissmann Nim

A new subgrouping of low back pain to explain alterations in lumbar muscle function and morphology

Sophie van Oosterwijck

Nonsurgical spinal decompression with Intervertebral differential dynamics: outcomes of low back pain in a selected Nigerian population: an observational study Ezinne Ekediegwu

#### 12.35 Lunch Break

Differences in psychological factors, disability and fatigue according to the chronicity grades in non-specific low back pain patients: a cross-sectional study Aisyah Nagiyah Rosman

Structural alterations of cognitive emotional brain regions are linked to spinal nociception Evy Dhondt

Evaluation of the correlation between gait pattern disorders in high-heel shoes and the occurrence of low back pain in young women *Artur Stolarczyk* 

Discussion

# **Self-management in back pain and MSK-the new black?** *Moderator: Jan Hartvigsen*

15.00	Introduction Jan Hartvigsen
15.05	What is self-management and what does it mean for patients and clinicians? Alice Kongsted
15.20	The Solas project: Irish initiative to support self-management for people with osteoarthritis and back pain  Deirdre Hurley Osing
15.35	GLA:D Back: Group-based patient education integrated with exercises to support self-management of people with persistent back pain Inge Ris
15.50	Afternoon Break
16.20	SelfBack: An e-health decision support system to improve self-management for people with back pain Paul Jarle Mork
16.35	TEXT4myBACK- The development process of a self-management intervention delivered via text message Carolina Fritsch
16.45	Mechanisms influencing the implementation of an evidence-based program for people with low back pain- GLA:D®Back Inge Ris / Jan Hartvigsen
16.55	Discussion
17.10	Closing Ceremony & Poster Prizes