



Final Programme

EUROSPINE 2014

October 1-3, 2014

Cité Internationale, Lyon, France

www.eurospine2014.eu



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A 04-07/01 Revo - FR



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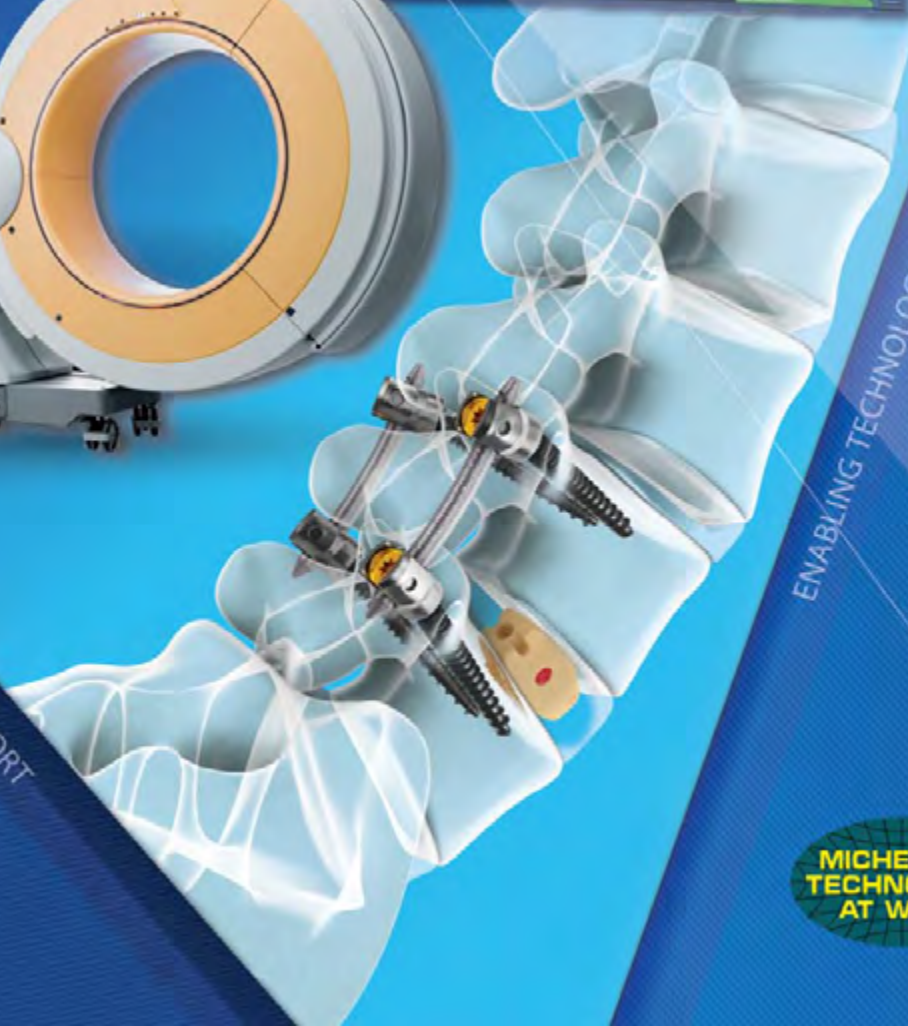
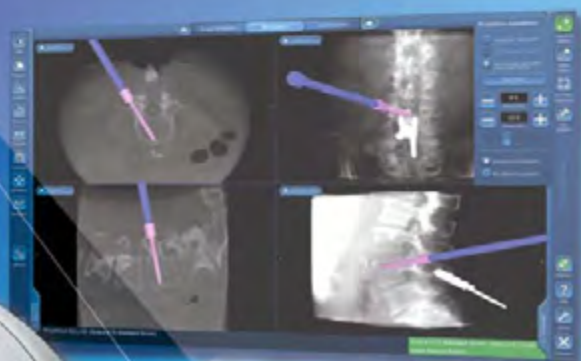
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the Medtronic booth
to learn more



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AT WORK**

Welcome Messages

Welcome Message from the Local Host



Dear colleagues and friends,
On behalf of the local organising committee hosts, I would like to personally welcome you in Lyon to the annual EUROSPINE meeting 2014. Lyon is a historic city designated as a

UNESCO world heritage site. Enjoy the rich history of the town including the tradition of silk-weaving and also find out why Lyon is considered the "birthplace" of cinema. Of course you will enjoy the « French cuisine» and wine in this gastronomic city. It will be an unforgettable experience.

I would like to thank the organising committee for its help to give a personal French touch to this European Spine meeting.

The pre-meeting courses and the scientific programme are both of high quality

Jean-Charles Le Huec, MD, PhD, Prof

Chairman Ortho-Spine department,
Dir Surg Research Lab - Bordeaux University Hospital, France,
Past president of EUROSPINE, ISASS

Welcome Message from the 2014 President of EUROSPINE



Welcome,
There is a unique flavour to EUROSPINE, and each Annual meeting is different and special. Where else could the elements of 'Spine, wine and dine' be so harmoniously matched

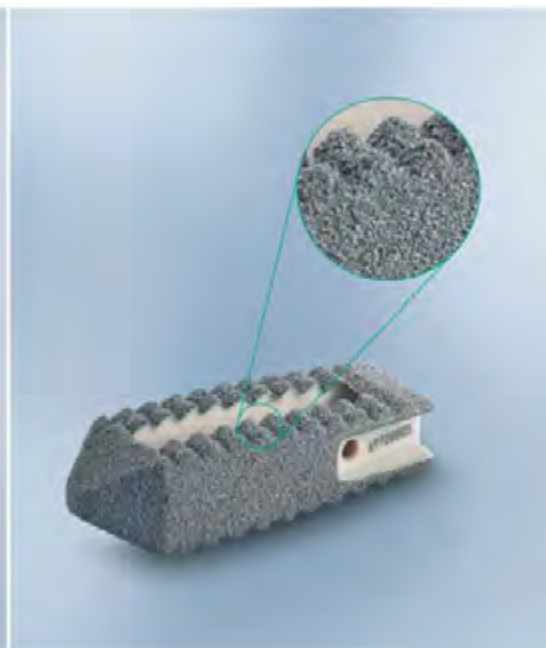
Lyon is a perfect venue, with an established track record of hosting major conferences and specifically medical and spine meetings. The members of EUROSPINE relish the interaction and symbiosis between the elite scientific meeting and the other ingredients of a good Congress.

A mark of the success of our EUROSPINE meetings is the high proportion of participants that come back for more. Abstracts submissions are reviewed in a 'blinded' way by multiple reviewers. Only about 10% are accepted for the main podium, this harsh but fair policy makes for high quality and integrity of presented material.

Live educational events have many components. There are podium sessions, 'Quick-fire' short papers and e-posters. Lunch time workshops add to the educational content. Providing CME accreditation involves meeting the high standards of EACCME. This meeting is about giving you, our important partners, the best of environments for networking. The multicultural diversity of Europe coupled with International delegates from China, South America and the rest of the Globe makes a superb melting pot for fresh ideas in science and technology. As the President of EUROSPINE it is my honour and pleasure to welcome you to 'un beau mélange'.

Phil Sell, MSc, FRCS

University Hospitals of Leicester and Nottingham
University Hospitals United Kingdom
President of EUROSPINE 2014



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PROSPACE^{XP}

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Arcadius^{XP} L^{*}

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¹ Boyle C. Cheng, PhD, Biomechanical Pullout Strength and Histology of Plasmapore^{XP} Coated Implants: Ovine Multi Time Point Survival Study, Aesculap ART129 12/13

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Committees

EUROSPINE PRESIDENT

Philip J. Sell, UK

EUROSPINE VICE PRESIDENT

Haluk Berk, Turkey

EUROSPINE PAST PRESIDENT

Ferran Pellisé Urquiza, Spain

EUROSPINE SECRETARY

Everard Munting, Belgium

EUROSPINE TREASURER

Frank Kandziora, Germany

EUROSPINE ASSISTANT TREASURER

Finn Bjarke Christensen, Denmark

CHAIR OF EDUCATION COMMITTEE

Jörg Franke, Germany

CHAIR OF PROGRAMME COMMITTEE

Thomas Blattert, Germany

MEMBER AT LARGE

Michael Ogon, Austria

LOCAL HOST

Jean Charles Le Huec, France

CO-LOCAL HOSTS

Pierre Roussouly, France

Gilles Perrin, France

Jean Paul Steib, France

Cédric Y. Barrey, France

Christophe Garin, France

PROGRAMME COMMITTEE CORE REVIEWERS (Abstracts and Programme Coordination)

Thomas Blattert, Schwarzach, Germany (Chair)

Selçuk Palaoglu, Ankara, Turkey (Cervical Spine)

Cédric Barrey, Lyon, France (Adult thoracolumbar, non-degenerative: trauma, tumor, infection)

Karin Würtz, Zürich, Switzerland (Basic Science)

Josef Grohs, Vienna, Austria (Adult thoracolumbar, degenerative, Deformity)

Martin Gehrchen, Copenhagen, Denmark (Growing Spine)

Stavros Stavridis, Thessaloniki, Greece (Other Growing Spine)

Lunch Symposia and Pre-Meeting Committee

Chair: Ralph Kothe, Germany

Member: Luis Alvarez Galovich, Spain

Member: Pierre Roussouly, France

Abstract Co-Reviewers

Cervical Spine

Dimitrios Korres, Greece

Tim Pigott, UK

Adult thoracolumbar, non-degenerative (trauma, tumor, infection)

Ibrahim Obeid, France

Antonio Faundez, Switzerland

Adult thoracolumbar, degenerative, Deformity

Mark Lorenz, USA

Claudius Thomé, Austria

Basic Science

Conny Neidlinger-Wilke, Germany

Werner Schmölz, Austria

Stephen Ferguson, Switzerland

Growing Spine

Martin Repko, Czech Republic

Acke Ohlin, Sweden

Others

Klaus Schnake, Germany

Efthimios Samoladas, Greece



EUROSPINE-SRS Joint 2015 Spring Meeting



2nd EUROSPINE Spring Speciality Meeting

Focus on:

Spinal Deformity from Early Childhood to Adulthood

April 23-25, 2015

Crowne Plaza Barcelona - Fira Center, Barcelona, Spain



Meeting Chairs

Ahmet Alanay – Istanbul, TR

Haluk Berk – Izmir, TR

Marinus de Kleuver – Nijmegen, NL

Ferran Pellisé – Barcelona, ES



www.eurospinemeeting.com
www.eurospine-spring.com

Addresses and Important Dates

Organising Secretariat, Housing



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congress website: www.eurospine2014.eu

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Scientific Congress Website: E-Posters and
constantly uploaded photos from the meeting
www.eurospinemeeting.com



<https://www.facebook.com/EuroSpine>
<https://twitter.com/EuroSpineSoc>

Congress Venue

Lyon Cité Internationale Congress Centre
50 Quai Charles de Gaulle | 69463 Lyon cedex 06

Important Dates

Press Conference
Wednesday, October 1 – 11:30
Room Bellecour 1

Exhibition Opening & Welcome Reception

Wednesday, October 1 – 17:30
Lyon Cité Internationale Congress Centre

Medal Lecture (Mark Stevenson)

Thursday, October 2 – 11:25
Plenary Hall

EUROSPINE General Assembly

(Members only)
Thursday, October 2 – 16:45
Plenary Hall

Official Congress Evening at own expense

Thursday, October 2 – 19:30
Paul Bocuse Halles

EUROSPINE 2014 Best of Show Papers and Best Podium Prize

Friday, October 3 – 10:30
Plenary Hall

Membership



The brightest minds in spine are members of EUROSPINE. Although orthopaedics and neurosurgeons are the core of EUROSPINE's membership, we welcome all spine related disciplines and professionals. Solving the challenges we are facing in spinal matters requires a multidisciplinary effort, and EUROSPINE is a place for all of today's spine professionals.

Above all, EUROSPINE is its members.

Significantly reduced registration fees for EUROSPINE Meetings

Research grants

Subscription to the ESJ (hard copy and online version)

Access to OOT (Open Operating Theatre, video database)

e-newsletter and annual report

Access to member area on website

Exclusive early access to webcasts

Full voting rights at the general assembly

Option to participate in Spine Tango and access to Patient Line

Special "Young Members" category



visit eurospine.org

EUROSPINE Meetings

Annual meeting

Spring Speciality Meeting

Task Force on Research

Research grants up to EUR 100,000 p.a.

Annual research course

Bi-annual abstract course

Patient Line

Patient information platform

Spine Tango

The international spine registry

European Spine Course Diploma

Consistent educational programme to future spine specialists

EUROSPINE

The Spine Society of Europe

www.eurospine.org

www.eurospinemeeting.com

facebook.com/EUROSPINE

twitter.com/EuroSpineSoc



Good to know

CME points are assigned to participants per half-day.

To collect your CME points for your certificate you need to let the hostesses located at the door of the session halls SCAN THE BARCODE on your name badge, each half-day, at the following times:

Morning: between 08:00 and 11:00

Afternoon: between 13:30 and 16:30

Your Certificate will be available for download via a personal link which the Organisers will send you via email one week after the conference.

We are pleased to inform you that the application for European accreditation for the 3 following events was granted European CME credits (ECMEC) by the European Accreditation Council for Continuing Medical Education (EACCME).

EUROSPINE Pre-Day course: Cervical Myelopathy, Current Concepts and Controversies: Event code: 10997 - granted 3 European CME credits (ECMEC)

»The 'EUROSPINE 2014' Pre-Day course: Cervical Myelopathy, Current Concepts and Controversies' is accredited by the European Accreditation Council for Continuing Medical Education (EACCME) to provide the following CME activity for medical specialists. The EACCME is an institution of the European Union of Medical Specialists (UEMS), www.uems.net.«

»The 'EUROSPINE Pre-Day course: Cervical Myelopathy, Current Concepts and Controversies' is designated for a maximum of (or 'for up to') 3 hours of European external CME credits. Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.«

»Through an agreement between the European Union of Medical Specialists and the American Medical Association, physicians may convert EACCME credits to an equivalent number of AMA PRA Category 1 Credits™. Information on the process to convert EACCME credit to AMA credit can be found at www.ama-assn.org/go/internationalcme.«

»Live educational activities, occurring outside of Canada, recognized by the UEMS-EACCME for ECMEC credits are deemed to be Accredited Group Learning Activities (Section 1) as defined by the Maintenance of Certification Program of The Royal College of Physicians and Surgeons of Canada.«

EUROSPINE Pre-Day course: Sagittal Balance: Event code: 10994 - granted 3 European CME credits (ECMEC)

»The 'EUROSPINE 2014' Pre-Day course: Sagittal Balance' is accredited by the European Accreditation Council for Continuing Medical Education (EACCME) to provide the following CME activity for medical specialists. The EACCME is an institution of the European Union of Medical Specialists (UEMS), www.uems.net.«

»The 'EUROSPINE Pre-Day course: Sagittal Balance' is designated for a maximum of (or 'for up to') 3 hours of European external CME credits. Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.«

»Through an agreement between the European Union of Medical Specialists and the American Medical Association, physicians may convert EACCME credits to an equivalent number of AMA PRA Category 1 Credits™. Information on the process to convert EACCME credit to AMA credit can be found at www.ama-assn.org/go/internationalcme.«

»Live educational activities, occurring outside of Canada, recognized by the UEMS-EACCME for ECMEC credits are deemed to be Accredited Group Learning Activities (Section 1) as defined by the Maintenance of Certification Program of The Royal College of Physicians and Surgeons of Canada.«

EUROSPINE 2014: Event code: 10541 - granted 18 European CME credits (ECMEC)

»The 'EUROSPINE 2014' is accredited by the European Accreditation Council for Continuing Medical Education (EACCME) to provide the following CME activity for medical specialists. The EACCME is an institution of the European Union of Medical Specialists (UEMS), www.uems.net.«

»The 'EUROSPINE 2014' is designated for a maximum of (or 'for up to') 18 hours of European external CME credits. Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.«

»Through an agreement between the European Union of Medical Specialists and the American Medical Association, physicians may convert EACCME credits to an equivalent number of AMA PRA Category 1 Credits™. Information on the process to convert EACCME credit to AMA credit can be found at www.ama-assn.org/go/internationalcme.«

»Live educational activities, occurring outside of Canada, recognized by the UEMS-EACCME for ECMEC credits are deemed to be Accredited Group Learning Activities (Section 1) as defined by the Maintenance of Certification Program of The Royal College of Physicians and Surgeons of Canada.«



Good to know



Patient Day

On September 30 from 09:30 to 12:30, EUROSPINE, the Spine Society of Europe, invites interested persons to a public patient information event themed “MAL AU DOS ET CHIRURGIE”. Find more information on page 34.

Webcasts

As EUROSPINE wants to offer participants as much educational value as possible, presentations from the main session hall will be recorded given that the speakers agreed to it. This enables you to watch presentations again to catch what you have missed. The webcasts will be available after the Congress in an online library accessible via the EUROSPINE meetings website.

Smartphone App

Have the most relevant and up-to-date conference information at hand! Not only will you be able to easily access scientific and logistical congress information (e.g. programme, speakers, sessions, congress venue,...), but you will also be able to participate in interactive votings, bookmark your favorite sessions and access the exclusive e-version of “The Spine Times”. Free WIFI is available within the entire congress venue.

Audience Response System (ARS)

Due to its great success at the last EUROSPINE conference the Audience Response System will be used again during the main sessions to ensure an interactive learning experience for all participants. To participate in an interactive session, please download the EUROSPINE smartphone app.

The Spine Times

Get your free copy of the congress’ daily newspaper, providing up-to-date information about hot topics and the latest trends, giving an insight into EUROSPINE, the Spine Society of Europe, and enriching the overall congress life as well as providing tips for social activities in Lyon.

Member Lounge at the EUROSPINE booth

All members are invited to retreat and meet colleagues and friends in the EUROSPINE Member Lounge, located at the EUROSPINE booth. Just show your name badge with the member seal on it and step in!

Registration

Registration Opening Times

The registration counters are located in the "hall Terreaux" - level 0, and will be open during following hours:

Tuesday, September 30, 2014

for Pre-Day Courses 12:00-17:00

Tuesday, September 30, 2014

free drink when taking advantage of registering the evening beforehand 17:00-19:00

Wednesday, October 1, 2014

07:30-19:00

Thursday, October 2, 2014

07:30-19:00

Friday, October 3, 2014

07:30-15:30

Registration Counters

PREPAID REGISTRATION is for participants who have registered and paid in advance. Please have a print-out of the final info e-mail at hand when approaching the desk.

ON-SITE REGISTRATION is for participants who have not pre-registered and paid.

Please note that congress materials are subject to availability to participants who are registering and paying their fees on-site.

EXHIBITOR REGISTRATION is located in the registration area.

THE CONGRESS BAG counter is located in the "FORUM A" Level -2

On-site Registration Fees

Annual Meeting:

EUROSPINE Member	EUR 450,-
Non Member	EUR 800,-
Residents / Fellows / Basic Scientists*	EUR 250,-
Official Congress Evening	EUR 95,-

Pre-Day Courses:

Pre-Day course with ES full Registration	EUR 30,-
Pre-Day Course only	EUR 50,-
Residents / Fellows / Basic Scientists*	EUR 30,-

* upon presentation of a letter signed by his/her Hospital/Clinic Supervisor or his/her University/Laboratory, confirming his/her status

All fees are including local taxes where applicable. The conference hosts reserve the right to adjust registration fees to exchange rate development.

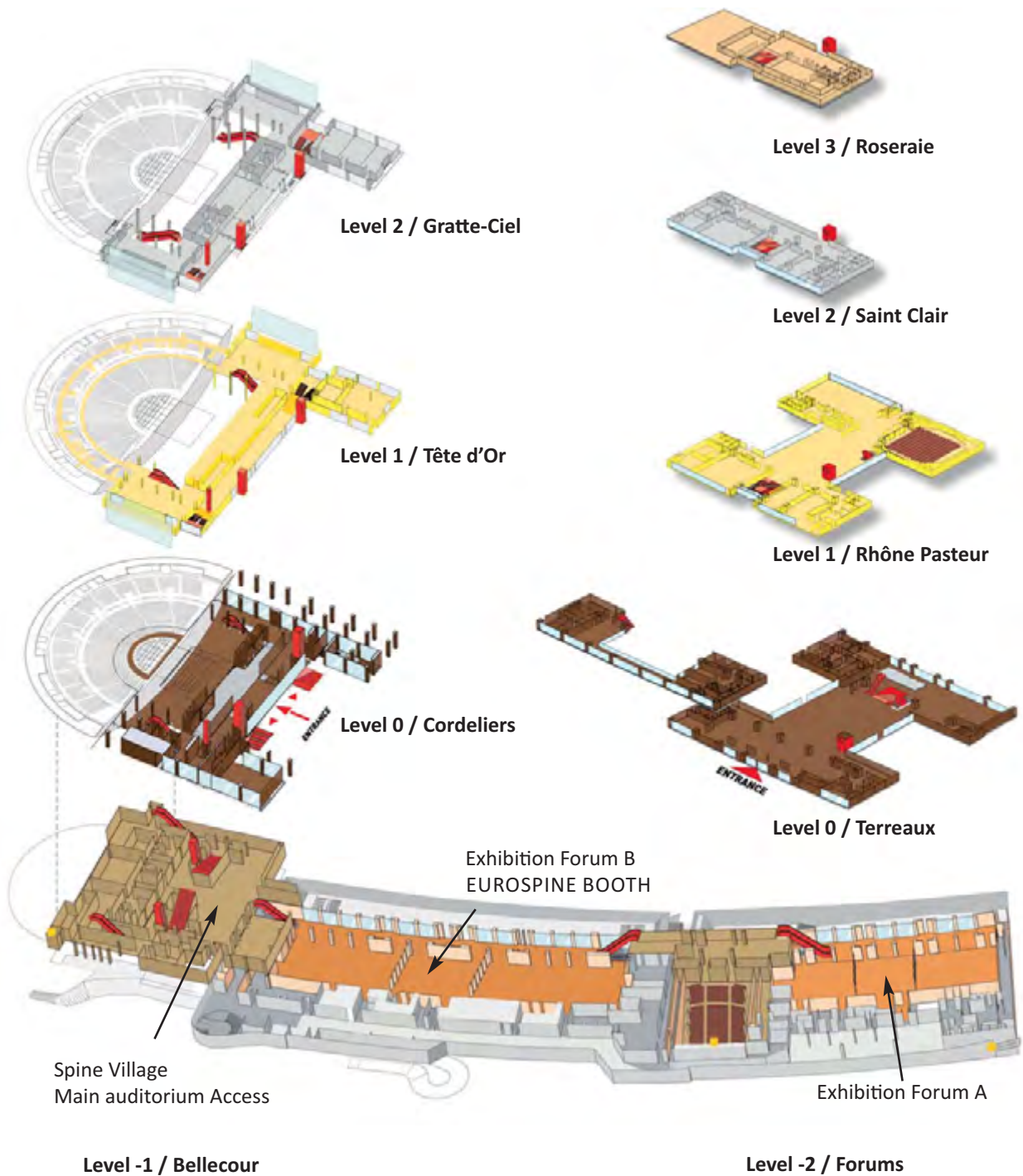
Participants' Registration Fee includes

- Admission to all scientific sessions
- Admission to the workshops organised by the industry
- Congress materials
(congress bag, final programme, abstract publication, name badge)
- Access to the exhibition
- Coffee breaks
- Welcome Reception/Exhibition Opening, Wednesday, October 1, 2014

Payment

Please note that all on-site payments need to be made in EURO or by credit card (VISA, Mastercard, American Express will be accepted). Unfortunately we cannot accept traveller cheques, other credit cards, eurocheques or other currencies. There is no possibility to exchange currency at the congress venue.

Floorplan overview



Congress Material

Name Badges

Participants will receive their name badge when collecting their congress documents.

Please wear your name badge during all congress events, including the networking activities.

Admission to scientific sessions is strictly restricted to participants wearing their badges.

Exhibitors are not entitled to attend the scientific sessions with the exception of their own company's workshop.

Please note: Participants who misplace their badge need to pay for a new one.

Name Badge Codes:



EUROSPINE Member

NM Non-member

EXH Exhibitor

P Press

Pre-Day Course badge

PDC1 Pre-Day Course 1

PDC2 Pre-Day Course 2

How to read your name badge

If you registered for one day only you can see it here

Your name and country of origin

Your personal barcode:
scan to collect your CME credits.

Name badge code
(in this case: NonMember)

Official Congress dinner access.
(1 = quantity. D = Dinner access)

Exhibitors at the EUROSPINE congress may scan this QRcode to collect basic information about you: name, email, institution, city and country. This information may be used for commercial purposes. Permission or refusal of badge scanning remains the badge holder's responsibility.

Congress Bags

With your congress documents, you will receive a congress bag voucher.

Congress bags can be picked up at the congress bag counter (see on-site signage and floor plan on p. 90) during registration opening hours (see p. 13)

In the congress bags you will find:

- Final Programme Book
- Abstract Supplement by ESJ
- pen & Note pad
- bag inserts from companies

Certificate of Attendance

Your Certificate will be available for download via a personal link which the Organisers will send you via email one week after the conference. In order to claim all your CME points correctly, you need to scan the barcode on your name badge at self-scanning stations during specific times. Find more information on page 11.

The scientific programme of the EUROSPINE 2014 Congress has been accredited a maximum of European CME credits (ECMEC), 3 per half day (2 credits for Thursday morning), by the European Accreditation Council for Continuing Medical Education (EACCME).





LUNCH WORKSHOP

XLIF® for Deformity and Advanced Applications

Faculty: Dr. Pedro Berjano (Italy), Mr. Alwyn Jones (UK), Dr. Markus Quante (Germany)

LOCATION: Saint Clair 2, Level 2 | Cité Centre de Congrès Lyon | Thursday, 2 October, 2014 | 12:00 – 14:00

Visit us at EUROSPINE | October 1-3, 2014 | Lyon, France

NUVASIVE® STAND #B20 in HALL B

www.nuvasive.com



Practical Information (from A-Z)

Bank & Exchange

Banking hours are Monday to Friday, from 9:00 to 16:30.

You can find cash machines everywhere in Lyon and accessible 24 hours a day.

For cash withdrawals, check with your bank for fees or which cooperating bank will accept your card without risking extra fees.

Generally, you will be warned if a commission is going to be charged before validating the transaction.

Many hotels, restaurants and shops accept credit cards (Visa, MasterCard, sometimes American Express).

Catering on-site

Coffee breaks will be provided to EUROSPINE 2014 participants at given times. For more information, please refer to the respective sections below.

At hours outside the official breaks, coffee, refreshments and small snacks can be purchased on a cash basis in several shops situated outside the congress centre, close to the Hall Terreaux (registration area).

Certificate of attendance / CME credits

For more information of how to obtain the CME credits for your participation at EUROSPINE 2014, please refer to page 11.

Cloakroom

A cloakroom is available in the registration area, Hall Terreaux. You also have the possibility to store your luggage there.

This cloakroom is free of charge, managed By UNICEF association



About UNICEF

UNICEF promotes the rights and wellbeing of every child, in everything we do. Together with our partners, we work in 190 countries and territories to translate that commitment into practical action, focusing special effort on reaching the most vulnerable and excluded children, to the benefit of all children, everywhere.

Coffee Breaks

Coffee, Tea and French pastries will be served in the exhibition halls from Wednesday, October 1 to Thursday, October 2, between 10:00 and 10:30 as well as 15:20 and 15:50. On Friday, October 3, it will be served between 10:00 and 10:30.

Coffee Break areas are indicated with a coffee cup symbol on the venue floor plans.

Currency

The official currency in France is EURO (€).

E-Posters Area

E-Posters stations are located on Hall Bellecour (Level -1), close to the Spine Village. They are accessible during exhibition opening times only (see below).

Electricity

The main voltage in France is 230 V.

Round power outlet, with 2 holes for the phase and the neutral, as well as a border for the earth.

EUROSPINE Booth B19

The EUROSPINE Booth is located in the exhibition area (Forum B, see exhibition plan on page 92). Seize the opportunity to learn more about the activities of EUROSPINE, the Spine Society of Europe, and to become a member.

EUROSPINE Member Lounge

The Lounge at the EUROSPINE Booth is the place where you can retreat, relax and meet colleagues and friends. Access will be granted with member's badge only marked with the member sign.

Exhibition

The industry is waiting for you on the lower level (-2).

Opening hours :

Wednesday, October 1, 2014 - 08:00-19:00

Thursday, October 2, 2014 - 08:00-18:00

Friday, October 3, 2014 - 08:00-14:00

Practical Information (from A-Z)

First Aid

In case of emergency, please contact the Staff at the registration counter.

Future Meeting Table

The Future meeting table can be found in the Lumière Level (-1) just before the escalators going down to the exhibition halls.

Insurance and Liability

The organisers cannot be held liable for any hindrance or disruption of the Annual Meeting or Courses arising from natural, political, social or economic events or other unforeseen incidents beyond their control. Registration implies acceptance of this condition.

The organisers cannot be held responsible for any personal injury, loss, damage or accident to private property, or for additional expenses incurred as a result of delays or changes in air, rail, road or other services, strikes, sickness, weather and other causes. All participants are encouraged to make their own arrangements for health, travel and accident insurance.

Internet Corner / WIFI Access

WIFI is available throughout the whole congress area.

Computers with Internet connection are available on Hall Bellecour (Level -1), close to the Spine Village.

Language of the Congress

The official congress language is English. Simultaneous translation is not provided.

Lead Retrieval

Some exhibiting companies may use a lead retrieval system at their booth or throughout their sponsor session.

If so, they may ask to scan the barcode on your name badge. When scanning the badge, they will receive the following information of yours (similar to exchanging business cards): First name, Last name, Acade-

mic title, complete postal as well as email address.

You may at any time refuse the scan if you do not want your contact details to be passed on to the representative company.

Lyon

Refer to page 25 for more information on Lyon.

Lunches

From 12:00 to 14:00, EUROSPINE Lunch Symposia and Industry Lunch Workshops are planned where food and drinks will be offered to the participants.

Mobile Phones

Please keep your mobile phones silent in the Session Rooms.

Parking

The nearest car parks to the congress centre are P0, P1 and P2

P0 - LYON PARC AUTO: 84 Quai Charles de Gaulle
Tel: +33 (0)4 78 93 66 15

Pricing (09:00-19:00)
EURO 0,60 each 20 minutes

P1 - VINCI PARK: 64 Quai Charles de Gaulle
04 78 89 77 78

Pricing:
Up to 1 hour: EURO 1,80
Up to 2 hours: EURO 3,60
Up to 3 hours: EURO 5,40
24 hours: EURO 24,90

P2 - LYON PARC AUTO: 34 Quai Charles de Gaulle
04 72 82 06 37

Pricing (09:00-19:00)
EURO 0,60 each 20 minutes

Practical Information (from A-Z)



Smoking

From November 15, 2006, smoking in public areas is strictly forbidden.

Smoking inside the venue is definitively banned. Dedicated smoking areas will be designated around the venue

Anyone found smoking within the venue will be requested to leave without refund.

Spine Village

EUROSPINE cordially welcomes the following Societies and their Representatives in the Society Village:

- > BSS (Brazilian Spine Society)
- > CES Charity UK
- > CSRS-ES (Cervical Spine Research Society – European Section)
- > DWG, Deutsche WirbelsäulenGesellschaft
- > SFCR (French Spine Surgery Society)
- > NASS (North American Spine Society)
- > Turkish Spine Society
- > Austrian Spine Society
- > IGASS (International Group for Advancement in Spinal Science)
- > Aospine Europe

Their booths will be located in the Hall Bellecour (Level -1).

So step by and find out about their numerous activities!

Speakers' Preview Centre

The Speakers' Preview Centre is located in the Hall Bellecour (Level -1).

Staff and equipment will be available for you to arrange and preview your presentation.

For more information, see Page 21.

Tipping

In France, restaurants and hotels bills include a service charge.

If you feel the service was good and want to show your appreciation, extra tips will be appreciated (without any fixed percentage, the amount is left to your judgement).

Useful Telephone Numbers

Dial 17 in an emergency to request the Police.

Dial 18 in an emergency to request Fire & rescue Service.

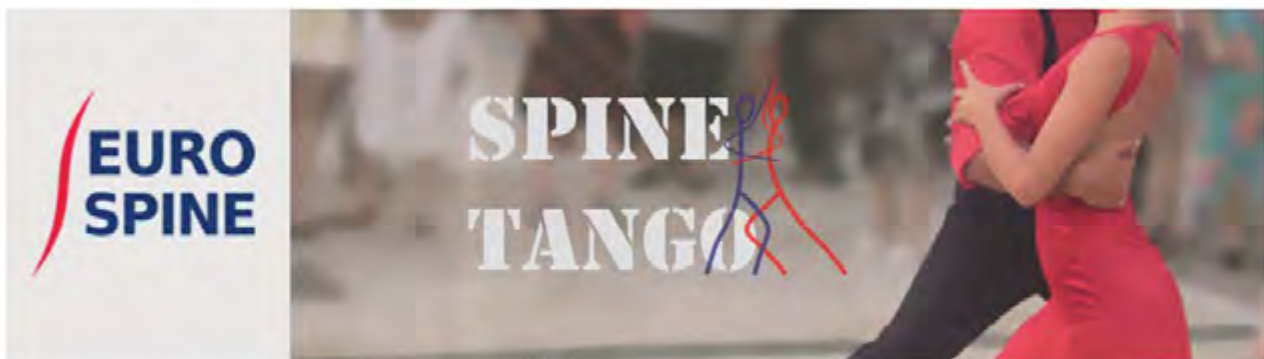
Dial 15 in an emergency to request Emergency Medical Service.

Weather

Temperature in Lyon in October usually range between 18-20°C by day.

Nights are cooler.

Visit us at the EUROSPINE booth!



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CODE OF CONDUCT
ANNUAL REPORT 2013**

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www.eurospine.org click on Spine Tango

Guidelines for Speakers & Chairpersons

Speakers' Preview centre

Hall Bellecour, level -1 – See on-site signage .

Opening Hours :

Tuesday, September 30, 2014

08:00-17:00

Wednesday, October 1, 2014

07:30-17:00

Thursday, October 2, 2014

07:30-17:00

Friday, October 3, 2014

07:30-15:30

Presentation file(s) must be uploaded **at least 2-3 hours** prior to the beginning of the corresponding session. In case of early morning sessions, please upload your presentation the day before. Professional staff will be happy to assist you in case of any technical problems.

The Speakers' Preview technicians will advise the speakers on the use of the presentation equipment and AV set-up in the session rooms. Visiting the Speakers' Preview Room will ensure that your presentation will run as smoothly as possible.

We kindly ask for your understanding that due to space and time limitation at the Speakers' Preview Centre presentations should be prepared and edited before submission. Thank you for bringing your presentations in a ready-to-upload format !

General Info

Two chairpersons will be allocated to each session responsible for introducing the speakers, controlling the timing of the sessions and moderating the discussion. All rooms are set-up in theatre style and are equipped with a lectern, microphones, projector, screen, laser pointer and a presentation laptop.

Timing of Sessions

In order to keep the sessions running to schedule and allow questions from the audience, it is very important to keep the presentations within the allotted time. Your slides will fade automatically after the time has elapsed. In this

respect we strongly recommend that speakers ensure that their presentation **does not exceed the allotted time** as we expect the Chairperson to **strictly adhere to the timetable**. Stopping a Speaker from completing a presentation is very embarrassing for all concerned and hopefully will not be necessary if everyone respects this requirement.

Regular Presentation: 5 minutes

QuickFire Presentation: 3 minutes

Info for Chairpersons

Chairpersons will be in charge of introducing the session, introducing the speakers, ensuring that the speakers respect the assigned time, asking questions and leading the discussion with speakers and the audience. Introduction of Speakers by the Chairperson should include their full title, place of work and main contribution to the subject area. This should provide due credit to the Speaker without using unnecessary time.

Conflict of Interest

EUROSPINE is committed to avoid potential **conflicts of interest**: any financial relationship between the Speaker/Chairperson and a company manufacturing or distributing a product must be disclosed and openly shared. **Conflicts of interest need to be disclosed** for each author on the **second slide**. Presentations that do not fulfil this prerequisite cannot be shown. During the presentation/discussion, open publicity for unfair and/or unsupported information about products/organisations/business should be avoided. Commercial logos or photographs should not be used (other than in the designated industry workshops).

Audio-visual Requirements for Speakers

EUROSPINE 2014 requires the speakers to adapt their audio-visual material to the technical equipment provided at the conference venue to ensure a smooth running of all sessions.

Technical & Formal Requirements

1. Each Session Room will be equipped with an i7 processor presentation laptop running Microsoft Windows 7 and Microsoft Office 2010, which leaves you in control of moving your slides back and forth.
2. Note: the Speakers' Preview Centre and network to the session rooms support **PowerPoint presentations** version Microsoft Windows 7 and Microsoft office 2010 only.
3. To safeguard presentation time and quality, we hope you understand that the use of your own laptop will not be possible. All presentations need to be handed in at the Speakers' Preview Centre at least 2 to 3 hours prior to the respective session.
4. The only presentation software supported will be Microsoft PowerPoint 2010 for Windows.
5. Please note that only single projection will be available.
6. Electronic presentations for QuickFire sessions and EUROSPINE Lunch Symposia will be projected on screens optimised for 4:3.
7. Speakers should bring their presentations saved preferably on USB memory stick. Other forms of recording like CD-R or DVD-R disk will be accepted as well.

Video or audio files

1. Please ensure that any video or audio files that are part of the PowerPoint presentation are also saved as separate video/audio files on the USB memory stick along with the PowerPoint presentation. We strongly recommend to create a folder with all the content of the presentation.
2. WMV or AVI are the only acceptable video formats. Movies must not exceed 50 MB each.

Useful information for Keynote/Macintosh users

1. If you have already prepared your presentation in Keynote on your Macintosh you are kindly asked to convert it to PowerPoint prior to the congress.
2. In case you cannot convert your keynote presentation as requested, professional staff at the Speakers' Preview Centre will be happy to help you. To give them enough time, please hand in your presentation at the Preview centre at least 4 to 5 hours prior to your presentation.

Saving your presentation / Font for your presentation

1. To avoid any compatibility problems, please do not use special characters (e.g. €, etc) to name your presentation or video files.
2. When saving your presentation, please use the following format:

Surname_Forename_NN.ppt

(where NN is the name or the number of the presentation as it appears in the final programme).

3. When choosing fonts for your presentation, please ensure that they are supported by Microsoft Office. If a non-standard font is used within a presentation, this will result in a substitute font being inserted by PowerPoint.
4. There is no size limit for presentations uploaded onsite at the Preview Centre. However, we still recommend keeping the size as small as possible.

Join the

**EURO
SPINE**

family today!

New Members Cocktail Reception

EUROSPINE has the pleasure to invite to the first **"New Members Cocktail Reception"**.

We would like to meet all our New Members personally, as personal relationship and networking are core values of EUROSPINE membership.

- » meet members of the EUROSPINE Society Board
- » get to know the EUROSPINE Membership Committee
- » receive your official EUROSPINE Membership Certificate



Make sure you join us at the **EUROSPINE booth** during the official **Exhibition Opening and Welcome Reception!**

Date: Wednesday, October 1, 2014

Time: Start 17:30

Place: EUROSPINE Society Booth, B 19 - Hall B

You are not yet a member of EUROSPINE, the Spine Society of Europe?

Visit our website and join the family today!

» www.eurospine.org/why-become-a-member.htm

Venue

Getting to Lyon and the Cité Internationale or The Lyon Convention Centre is easy: there are various means of transport available.

Coming to Lyon



By plane

- 27 French cities connected by daily, scheduled flights
- 43 scheduled, international flights, 19 charter routes and 7 cargo routes
- A hub for low-cost Easy Jet flights, with numerous daily flights
- By Train
- 10 minutes from the Part-Dieu TGV railway station
- 15 minutes from the Perrache railway station (Between Lyon and Paris, one TGV every 30 minutes during peak periods)
- Express tramway between Lyon St Exupéry airport and the Part Dieu TGV station



By train

- 10 minutes from the Lyon Part-Dieu Railway Station
- 15 minutes from the Lyon Perrache Railway Station
- With the TGV: 2h from Paris, 1h30 from Marseille, 4h from Bruxelles

Coming to the Convention Center



By car

The Convention center is situated close to the Lyon Périphérique Nord (Northern Ring Road). Exit at "sortie Porte de Saint Clair".

- 1½ hours from Geneva,
- 3 hours from Turin,
- 4 hours from Paris,
- 4½ hours from Milan,
- 5 hours Barcelona



Public transport

Several buses and trolley lines linked directly to the Métro, TGV station and City Centre:

- C1, C2 from Part Dieu Railway Station
- C5 from Bellecour Metro Station
- C4 from Jean Macé Metro Station
- Bus 70 from Part Dieu Railway Station
- C26 from Grange Blanche Metro Station
- Reach the centre of Lyon or the Part-Dieu TGV railway station in 12 minutes
- Express tramway between Lyon St Exupéry airport and the Part Dieu TGV station
- 6 Vélo'v stations (pushbike rental) within easy reach

Cité | Centre des Congrès | Lyon

50 Quai Charles de Gaulle - 69463 Lyon cedex 06

The Lyon Convention Centre is a unique place in Europe to host all kind of events: congresses, conferences, conventions, seminars and trade shows.

Ideally situated in a beautiful setting between the River Rhone and the Parc de la Tête d'Or, which is really close to the city, the Convention Center has a fully modular surface area of 25,000 m2 that can accommodate up to 19,000 people.



About Lyon

Lyon is easy to reach by plane (a shuttle gets you from the airport to the town centre in about 40 minutes) or by high speed TGV train (two hours from Paris or Roissy-Charles de Gaulle airport).

Discover the rich historical and cultural heritage of the city of Lyon whose 2000 year-old historic centre is now a recognised Unesco World Heritage site.

A spot of history

In Roman times Lugdunum was the capital of the three Gauls and symbolized the colonial power that made it a natural outpost of Rome. In the 11th century, after the barbarian invasions, Lyon awoke from the torpor into which it had subsequently fallen. Later, the Christian Religion would have a profound influence on the city's development. With the advent of the Renaissance, the town prospered and became a major trade centre, drawing numerous merchants and financiers. More particularly, Lyon found a new vocation at the end of the 15th century with the introduction of printing. In the middle of the 16th century the arrival of silk weavers from Italy gave birth to an industry that would continue to grow up until the 20th century. In the 18th century the town expanded as the renown of Lyon's silk manufacturers spread across Europe. The Revolution also strongly marked Lyon when, in 1793, the Convention ordered the troops to seize the city and destroy it. In the early 1800s, Jacquard invented the celebrated mechanism that doubled the number of looms working in the city and sparked off unrest that culminated in the silk weavers' riots. During the 19th century, the city absorbed the surrounding villages and undertook a series of major planning projects with the development of the city centre, the construction of the basilica, a hospital, schools, etc. The city continued to spread during the 20th century and in the closing decades many of its underdeveloped and insalubrious historical districts were restored.



Networking Programme



Opening & Welcome Reception

Date : **Wednesday, October 1, 2014**

Time : start 05:30

Place : Cité Internationale Congress Centre, Lyon

The Opening & Welcome Reception for registered participants and exhibitors will take place at the Cité Internationale Congress Centre, in the exhibition area.

The registration fee for EUROSPINE 2014 congress participants includes the attendance to the Opening & Welcome Reception.

Official Congress Evening

Date : **Thursday, October 2, 2014**

From 19:30 to 23:00

Place : Les Halles de Paul Bocuse - 102 Cours Lafayette - 69003 Lyon

Participation to the Official Congress Evening remains at own expense.

(rate information above, section "Congress fees")

How to get there:

> Public transport

Metro Station: "Place Guichard"

Tramway T1 Station: "Mairie du 3"

> from the convention center:

Bus C4 from "Cité Internationale" to "Saxe Lafayette" 21 min.

> **By Car:** Parking LPA Halles, entry Rue Garibaldi 10 min walking distance from Part Dieu Station



EUROSPINE Medal Lecture 2014



EUROSPINE is honored that Mark Stevenson has accepted to give this year's Medal Lecture:

The Future And What To Do About It
followed by Q&A / Discussion

Thursday, October 2, 11:25 Plenary Hall

Mark Stevenson

Mark Stevenson is a writer, ideas generator and futurist. He is author of the bestselling book, *An Optimist's Tour of the Future*, which was described by The Wall Street Journal as "sharp and fascinating". His skill is an ability to take complex or abstract concepts and trends and make them understandable by non-specialists.

Mark is co-founder of Flow Associates, a learning agency which develops optimum environments for creative innovation tied to critical thinking. He works with institutions, governments, corporations and schools all over the world looking at how the future will impact on them.

Mark is futurologist-in-residence at Primary Energy Research and sits on the advisory boards

of Virgin Earth Challenge and Every1Mobile, which builds large-scale social networks on mobile devices in developing economies.

Mark's numerous appearances in the media include interviews and profiles in the US, South America, Europe and Australia & New Zealand. He has recently had in-depth coverage in The Guardian (UK), Brand Eins (Germany), El Mundo (Spain), The Wall Street Journal (US) and ABC (Australia). He has also written for The Times, The Wall Street Journal, The Guardian, The Economist, The Daily Telegraph, and The New Statesman.

Mark is a fellow of the Royal Society for the encouragement of Arts, Manufactures and Commerce, Nibmaster General at the Ministry of Stories and the founder of The League of Pragmatic Optimists, an organisation that creates meeting places in cities and towns across the globe "where people who want to make the world better can meet, generate ideas and projects, get inspiration and find collaborators."

Mark's is an excellent public speaker probably helped by a previous career as a stand-up comedian. His recent speaking engagements include The Economist, The US National Space Symposium, IBM, Michigan School of Art and Design, Oxford University and Abbott Healthcare.

Press Conference

Wednesday, October 1

11:30 | Room Bellecour 1

(level - 1, just in front of the main auditorium)

International press conference at EUROSPINE 2014 in Lyon

Medical devices prices are controlled by the government in France. This leads to the lowest prices in Europe. France was the leading country for innovation in spine: pedicular screws, Cotrel Dubousset instrumentation, navigation, assisted surgery etc... Unfortunately innovation is not promoted anymore due to the lack of financial support in relation with no benefit by the companies. Some major companies left France and their products are not distributed anymore in our country.

What should be the compromise between acceptable prices for the reimbursement health care system and capacity of financing innovation by companies?

Day surgery is another major topic. Promoted by the health care system to save money, it seems to be a good solution for many pathologies **but who must dictate the limits?** safety must be included in the decision parameters and not only economical considerations.

Media participation at the press conferences is subject to accreditation by the **EUROSPINE Media Liaison Office**. Accreditation is reserved for official members of the press: chloe.paul@mcocongres.com



PARADIGM SPINE
the movement in spine care

Decompression and Coflex Interlaminar Stabilization Compared With Decompression and Instrumented Spinal Fusion for Spinal Stenosis and Low-Grade Degenerative Spondylolisthesis

Two-Year Results From the Prospective, Randomized, Multicenter, Food and Drug Administration
Registration Trial

David Auerbach, MDs

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of lumbar fusion for stenosis. This study was motivated by the search for motion-preserving, less-invasive alternatives to fusion. **Methods.** Three hundred twenty-two patients (215 Coflex and 107 fusions) from 21 sites in the United States were enrolled between 2006 and 2010. Subjects were randomized to receive laminectomy and Coflex interlaminar stabilization or laminectomy and posterolateral spinal fusion with spinal instrumentation in a 2:1 ratio. Overall device success required a 15-point reduction in Oswestry Disability Index, no reoperations, no major device-related complications, and no postoperative epidural injections. **Results.** Patient follow-up at minimum 2 years was 95.3% and 97.2% in the Coflex and fusion control groups, respectively. Patients

Claudication Questionnaire scores were significantly lower in the fusion group (symptom severity [$P = 0.023$]; physical function [$P = 0.008$]; satisfaction [$P = 0.006$]). Based on the Food and Drug Administration composite for overall success, 66.2% of Coflex and 57.7% of fusions succeeded ($P = 0.999$), thus demonstrating noninferiority. The overall adverse event rate was similar in the groups, but Coflex had a higher reoperation rate (7.5%, $P = 0.426$). At 2 years, fusions exhibited increased translation ($P = 0.002$) and a trend toward increased translation ($P = 0.002$) at the superior adjacent level, whereas Coflex maintained operative and adjacent level motion.

Conclusion. Coflex interlaminar stabilization is a efficacious alternative, with certain advantages compared with lumbar spinal fusion in the treatment of spinal stenosis and low-grade spondylolisthesis.

Key words: Coflex interlaminar stabilization, spinal stenosis, degenerative spondylolisthesis.

Level of Evidence: 1

Spine 2013;38:1529-1539

From the *Greater Baltimore Neurosurgical Associates, Baltimore, MD; †Department of Orthopaedic Surgery, Hospital for Joint Diseases-NYU, New York, NY; ‡The Spine Institute, Santa Monica, CA; and §Department of Orthopaedics, Bronx-Lebanon Hospital Center, Albert Einstein College of Medicine, Bronx, NY.

Acknowledgment date: October 15, 2012. First revision date: February 15, 2013. Second revision date: April 24, 2013. Acceptance date: April 29, 2013.

The device(s)/drug(s) that is/are the subject of this manuscript is/are Now FDA-approved and no longer under investigation.

Paradigm Spine, LLC (New York, NY) funds were received in support of this work.

Relevant financial activities outside the submitted work: consultancy, lecture, payment for manuscript preparation, patents, royalties.

The recent Spine Patient Outcomes Research (SPORT) studies and others have demonstrated the superiority of laminectomy compared with fusion. These findings have confirmed the use and

*Based on the Outcomes of the coflex[®] Interlaminar Technology PMA (P110008).

www.spinejournal.com

**Spine: 13 November 2013 - Volume 27 - Issue 17 - p 2679-2689. Wolters Kluwer Health Lippincott Williams & Wilkins[®]

Information on Scientific Programme

Debates

EUROSPINE 2014 Debates

There will be two debates about common, but hopefully stimulating topics with the intention to stimulate thinking and discussions on areas of controversy and to explore areas of consensus. The audience will be asked for their vote on the case management before and after the presentations to see if they could be persuaded to change their views as a result of the arguments presented.

Wednesday, October 1, 2014

11:00-12:00 Odontoid Typ II Fracture in Elderly has the Best Outcome with Surgery

Room : Plenary Hall

Moderator : Selçuk Palaoğlu, Ankara – Turkey

Against : Claes Olerud, Uppsala – Sweden

For : Christoph Josten, Leipzig - Germany

Thursday, October 2, 2014

15:50-16:35 I always stop at L5

Room : Plenary Hall

Moderator : Josef Grohs, Vienna – Austria

Rune Hedlund, Gothenburg – Sweden : I never fuse to the sacrum

Pierre Roussouly, Lyon – France : I always fuse to the sacrum

E-Posters

The E-Posters will be accessible for the participants during the whole meeting in Hall Bellecour and later on here : <http://eposterlyon.eurospine.org>

Presentation types

All abstracts were graded by a minimum of four reviewers by means of a blind peer review process. Only about 20% of the submissions were accepted for podium presentation.

Regular Presentations : 5 min + 2 min disc.

QuickFire presentations : 3 min + 2 min disc.

App-Rating: Each of the marked presentations shall be rated by the audience by assigning 1 (worst) to 5 (best) stars in following categories : topics, content, performance.

★★★★☆ App-Rating

Best Podium Presentation : will be evaluated within the Best of Show papers (Friday, 10:30-12:00). Again with the audiences' support and rating.

App-Voting : In marked presentations the audience is invited to vote on specific questions via the EUROSPINE app.

★★★★☆ App-Voting

Tuesday

Wednesday

Thursday

Friday

E-Posters

Industry
Workshops



EUROSPINE App 4.0

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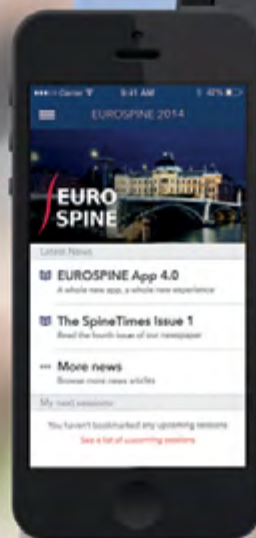
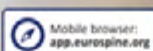
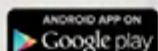
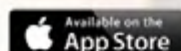
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Download the app for your iOS-device (iPhone and iPad), Android-smartphone or use the web app for all other smartphones.



For more information please visit app.eurospine.org



app.eurospine.org

Scientific Programme

Overview



WEDNESDAY, OCTOBER 01, 2014

	PLENARY HALL (Level 0)	AUDITORIUM LUMIERE (Level -1)	AUDITORIUM PASTEUR (Level 1)	Room Rhône 3AB (Level 1)	Room Rhône 2 (Level 1)	Room Rhône 1 (Level 1)	Room Bellecour 1 (Level -1)
08:30 – 10:00	p 40 Opening & Thoraco- Lumbar Spine, degenerative I						
10:00 – 10:30	Coffee Break						
10:30 – 12:00	p 41 Keynote Lecture & Debate						
12:00 – 14:00		p 41 EUROSPINE Symposium 1 Cervical Spine Trauma	p 42 EUROSPINE Symposium 2 Spine Education in Europe				
14:00 – 15:20	p 42 Cervical Spine						
15:20 – 15:50	Coffee Break						
15:50 – 17:30	p 43 Thoraco-Lumbar Spine, non degenerative						
Start 17:30	Welcome recital (Plenary Hall) Welcome Reception in Exhibition Halls A & B						

THURSDAY, OCTOBER 02, 2014

	PLENARY HALL (Level 0)	AUDITORIUM LUMIERE (Level -1)	AUDITORIUM PASTEUR (Level 1)	Room Rhône 3AB (Level 1)	Room Rhône 2 (Level 1)	Room Rhône 1 (Level 1)	Room Bellecour 1 (Level -1)
08:30 – 10:00	p 48 Degenerative, Scoliosis						
10:00 – 10:30	Coffee Break						
10:30 – 12:00	p 49 Presidential Address, Medal & Awards Lectures						
12:00 – 14:00		p 50 EUROSPINE Symposium 3 Economic Evaluations in Spinal Medicine					
14:00 – 15:20	p 50 Thoraco-Lumbar Spine, degenerative II						
15:20 – 15:50	Coffee Break						
15:50 – 16:35	p 51 Debate						
Start 16:45	p 52 EUROSPINE General Assembly (for members only)						
Start 19:30	Official Congress Evening (Paul Bocuse Halls) – At own expense						

FRIDAY, OCTOBER 03, 2014							
	PLENARY HALL (Level 0)	AUDITORIUM LUMIERE (Level -1)	AUDITORIUM PASTEUR (Level 1)	Room Rhône 3AB (Level 1)	Room Rhône 2 (Level 1)	Room Rhône 1 (Level 1)	Room Bellecour 1 (Level -1)
08:30 – 10:00	p 56 Growing Spine						
10:00 – 10:30	Coffee Break						
10:30 – 12:00	p 57 The « Best of Show » Papers						
12:00 – 14:00		p 59 EUROSPINE Symposium 5 Overcoming Obstacles to Recovery in the Lumbar Spine	p 59 EUROSPINE Symposium 6 Ankylosis Spondylitis	p 59 EUROSPINE Symposium 4 Pyogenic Spinal Infections			
14:00 – 15:30			p 63 Quick Fire Thoraco-Lumbar Spine, degenerative	p 61 Quick Fire Cervical Spine	p 60 Quick Fire Growing Spine	p 65 Quick Fire Thoraco-Lumbar Spine, non degenerative	p 67 Quick Fire Basic Science / Other
15:30	ADJOURN / END						



**EURO
SPINE**

PATIENT DAY
JOURNÉE DÉDIÉE
AU PUBLIC

EUROSPINE: Société Européenne
de la Colonne vertébrale

30 septembre 2014, 9:30-12:30h

Conférence Grand Public

Cité Internationale, LYON
Salon Rhône 2

Langue: français
Entrée libre

**RÉSERVEZ
LA
DATE**

Sujet: "Mal au dos et chirurgie"

CONFÉRENCE - DÉBAT:

Modération

C BARREY

Introduction

P SELL, JC LEHUEC

Patient Line:

A FAUNDEZ

Site à l'attention des patients

Quelles sont les structures
anatomiques en cause?

C BARREY

Mal au dos et sciatique: Même maladie?

G PERRIN

Mon enfant, mon ado a mal au dos

C GARIN

Que faire avant de consulter
le chirurgien?

N FRAISSE

Opérer, pourquoi faire?
Pour quels résultats?

E FAVREUL

J'ai été opéré mais j'ai toujours mal:
Que faire?

B DEBONO

Chirurgie du dos et activités sportives

J HUPPERT

Scoliose: Quand et comment opérer?

P ROUSSOULY

Quand la douleur devient chronique

P VOLCKMANN

Session de questions et réponses

Plus d'informations et inscription:

www.eurospinemeeting.com/journee_publicue
contact@eurospine2014.eu

EUROSPINE, the Spine Society of Europe
Seefeldstr. 16, 8610 Uster-Zurich, Switzerland

Localité:

Cité | Centre des Congrès | Lyon
50 Quai Charles de Gaulle, 69463 Lyon cedex 06

Scientific Programme

Tuesday, September 30, 2014



Pre-Day Course Programme

Tuesday, September 30, 2014

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

Sagittal Balance

Room: Rhône 3A

Chair: Jean-Charles Le Huec (France)

Faculty: Cédric Barrey (France), Daniel Chopin (France), Alexis Faline (France), Antonio Faundez (Switzerland), Vincent Fiere (France), Stephan Parent (Canada), Pierre Roussouly (France), Marc Szadkowski (France)

- 12:00-13:00 ■ Welcome and Lunchbox

- 13:00-17:00 ■ Courses

13:00-15:00

- Basic principles of pelvic parameters. A. Faundez
- New classification of spine shape according to Roussouly. JC. Le Huec
- Demonstration of digitalized spine shape analysis. Ph. Roussouly
- Influence of spinal parameters on spine diseases occurrence. C. Barrey
- The contact force theory. P. Roussouly
- High grade spondy analysis and surgical treatment. D. Chopin

- 15:00-15:30 ■ Coffee Break

15:30-17:00

- Symptomatic one level DDD modic 1 L4L5 : How I manage the balance. M. Szadkowski
- Symptomatic one level degen spondy L4L5 : How I manage the balance. V. Fiere
- Symptomatic one level lumbar stenosis L4L5 –L5S1: How I manage the balance. A. Faundez
- Symptomatic de novo lumbar scoliosis: How I manage the balance. P. Roussouly
- Symptomatic ankylosing spondylitis thor–lumbar kyphosis: How I manage the balance. JC. Le Huec
- Symptomatic imbalanced thoraco–lumbar scoliosis How I manage the frontal imbalance: analysis of open and close dislocation. A. Faline
- How I manage the frontal and sagittal imbalance simultaneously. D. Chopin
- Proximal junctional kyphosis : etiology and treatment. S. Parent

Cervical Myelopathy: Current concepts and controversies

Room: Rhône 3B

Chair: *Hugues Pascal Moussellard (France)*

Faculty: *Philip Bancel (France), Bernard Jeanneret (Switzerland), Ralph Kothe (Germany), Claes Olerud (Sweden) Luca Papavero (Germany), Yann Péréon (France)*

- 12:00-13:20** ■ **Basics**
- Welcome and introduction. *HP. Moussellard*
 - Clinical Anatomy. *C. Olerud*
 - Balance and biomechanics. *R. Kothe*
 - Clinical presentation and evaluation. *P. Bancel*
 - The role of Electrophysiology. *Y. Péréon*
 - Radiographic evaluation. *P. Moussellard*
 - Natural course of cervical stenosis and indication for surgery. *B. Jeanneret*
 - Discussion
- 13:20-13:50** ■ **Break**
- 13:50-15:00** ■ **Surgical treatment**
- Surgical approach and fixation: decision making. *L. Papavero*
 - Anterior techniques. *B. Jeanneret*
 - Posterior techniques. *R. Kothe*
 - Complications. *C. Olerud*
 - Postoperative evolution (recovery, prognosis). *L. Papavero*
 - Acute on chronic: trauma and cervical stenosis. *P. Bancel*
 - Discussion
- 15:00-15:30** ■ **Break**
- 15:30-16:45** ■ **Case presentations and interactive discussion**
- 16:45-17:00** ■ **Conclusions**
Hugues Pascal Moussellard

Note:

Separate Registration is needed:

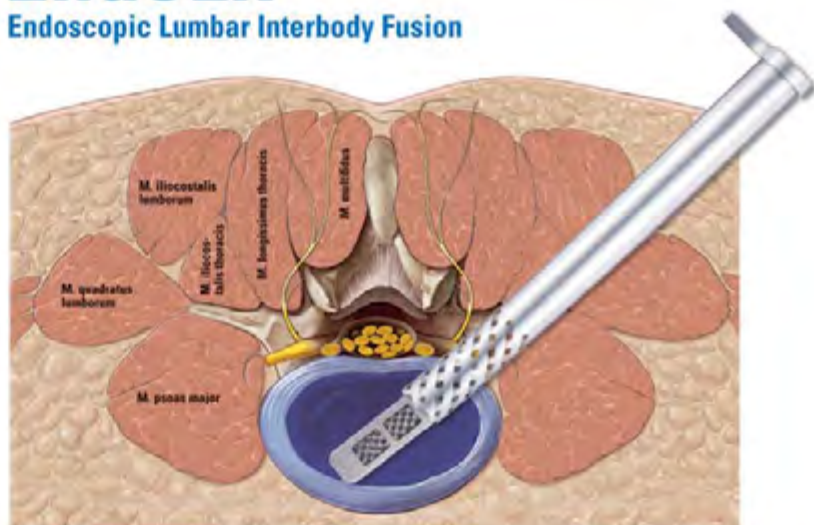
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Scientific Programme

Wednesday, October 1, 2014



Wednesday, October 1, 2014

- 07:30** ■ **on-site Registration**
- 08:30** ■ **OPENING**
Local Hosts
- 08:33** ■ **WELCOME ADDRESS**
EUROSPINE President, Phil Sell, Leicester, UK
- 08:36** ■ **INTRODUCTION TO THE SCIENTIFIC PROGRAM**
The blinded peer review process of the program committee
Thomas Blattert, Schwarzach, Germany, Chair Program Committee 2014

08:40-10:00 ■ **Thoraco-Lumbar Spine, Degenerative I**
★☆☆☆☆ App-Rating
Room: Plenary Hall
Chairs: Claudius Thomé, Innsbruck, Austria; Pierre Roussouly, Lyon, France

- **1** WHAT LEVEL OF PAIN ARE PATIENTS PREPARED TO LIVE WITH AFTER SURGERY FOR LUMBAR DEGENERATIVE DISORDERS?
Tamas F Fekete, Frank S Kleinstück, Daniel Haschtmann, Dezső Jeszenszky, Francois Porchet, Anne F Mannion
Schulthess Klinik, Zürich, Switzerland
- **2** CLINICAL STUDY ON LUMBAR CORTICAL SCREWS IN ELDERLY AND OSTEOPOROTIC PATIENTS. A NOVEL TECHNIQUE IN SCREW POSITIONING.
Duccio Boscherini, Ramona Guastalla, Sylvain Duc
Cliniques de La Source - Hôpitaux Universitaires Genève
- **3** A 5-YEAR PROSPECTIVE STUDY INTO WHETHER PSEUDARTHROSIS AFTER POSTERIOR LUMBAR INTERBODY FUSION (PLIF) CAUSES LOWER BACK PAIN
Tokumi Kanemura, Kotaro Satake, Hidetoshi Yamaguchi, Yoshimoto Ishikawa, Akiyuki Matsumoto, Zenya Ito, Shiro Imagama
Konan Kosei Hospital, Spine Center
- **4** ADJACENT DISC DEGENERATION AND FACET JOINT ARTHRITIC CHANGE AFTER LUMBAR FUSION: WHICH IS MORE AFFECTED?
Chang-Hoon Jeon, Nam-Su Chung, Han-Dong Lee, Seong-Youn Lim
Department of Orthopaedic Surgery, Ajou University School of Medicine, Suwon, Republic of Korea
- **5** TARGETED THERAPY OF LOW BACK PAIN ASSOCIATED WITH DE NOVO DEGENERATIVE LUMBAR SCOLIOSIS IN THE ELDERLY: PROSPECTIVE OBSERVATION COHORT STUDY
Kiyotaka Yamada, Yoshinori Fujimoto, Toshio Nakamae, Osami Suzuki, Takashi Hashimoto, Masaki Matsuura, Taiki Morisako
Hiroshima General Hospital

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- 6 SPINAL FUSION IS ASSOCIATED WITH INCREASED ADJACENT SEGMENT DISC DEGENERATION, WITHOUT CLINICAL CONSEQUENCE: LONG-TERM FOLLOW-UP OF FOUR RCTS

*Anne F Mannion, Gunnar Leivseth, Jens Ivar Brox, Peter Fritzell, Olle Hägg
Schulthess Klinik, Zürich, Switzerland*



- 7 ARE CURRENT IN VITRO BIOMECHANICAL PROTOCOLS SUITABLE TO EXPLAIN THE DEGENERATION OF ADJACENT SEGMENTS?

*Hans-Joachim Wilke¹, David Volkheimer¹, Masoud Malakoutian², Thomas R. Oxland^{2,3}
¹)Institute of Orthopaedic Research and Biomechanics, Center of Musculoskeletal Research (zmfu), University of Ulm, Germany; ²)Department of Mechanical Engineering, University of British Columbia, Vancouver, Canada; ³)Department of Orthopaedics, University of British Columbia, Vancouver, Canada*

- 8 THE DIFFERENCE OF OCCURRING SUPERIOR ADJACENT SEGMENT PATHOLOGY AFTER LUMBAR POSTEROLATERAL FUSION BY USING TWO DIFFERENT PEDICLE SCREW INSERTION TECHNIQUES IN 9-YEAR MINIMUM FOLLOW-UP

*Dingjun Hao, Baorong He, Liang Yan
Spine Surgery, Xi'an, China*

10:00-10:30 ■ BREAK

10:30-12:00 ■ **Keynote Lecture and Debate**
Room: Plenary Hall
Introduction: *Phil Sell, Leicester, UK*

10:30 ■ **Sagittal Balance is not Sagittal Contour**
Jean-Charles LeHuec, CHU Pellegrin Tripode, Bordeaux, France

11:00 ■ **Debate: Odontoid Type II Fracture in the Elderly has the Best Outcome with Surgery**
Moderator: *Selçuk Palaoğlu, Ankara, Turkey*
Against: *Claes Olerud, Uppsala, Sweden*
For: *Christoph Josten, Leipzig, Germany*

12:00-14:00 ■ **EUROSPINE LUNCH SYMPOSIA, Wednesday, October 1**

12:00 ■ **EUROSPINE LUNCH SYMPOSIUM 1**
Auditorium Lumière
Cervical Spine Trauma
Chairs: *Frank Kandziora, Frankfurt, Germany; Max Aebi, Bern, Switzerland*

12:00 Atlas fractures – Indication for surgery?
Matti Scholz, Frankfurt, Germany

12:15 Discussion

12:20 Traumatic spondylolisthesis of the axis –anterior or posterior stabilisation?
Frank Kandziora, Frankfurt, Germany

12:35 Discussion

12:40 Subaxial facet joint lesion – is there a standard treatment?
Max Aebi, Bern, Switzerland

12:55 Discussion

13:00 C-spine fractures in ankylosing spondylitis – pearls and pitfalls
Cumhur F. Oner, Utrecht, the Netherlands

13:15 Discussion

- 13:20** ■ **C-spine fractures in children – when to operate?**
Bronek M. Boszczyk, Nottingham, UK
- 13:25** ■ **Discussion**
- 12:00** ■ **EUROSPINE LUNCH SYMPOSIUM 2**
★☆☆☆ App-Rating
Auditorium Pasteur
Spine Education in Europe
Chair: Haluk Berk, Izmir, Turkey; Bernhard Meyer, Munich, Germany
- 12:15** Introduction – Why do we need such education?
Haluk Berk, Izmir, Turkey; Bernhard Meyer, Munich, Germany
- 12:25** Spine education from EANS perspective
Bernhard Meyer, Munich, Germany
- 12:40** Spine education from EFORT perspective
Jorge Mineiro, Barcarena, Portugal
- 12:55** UEMS and legal perspective: Multidisciplinary Joint Committee on Spine Surgery
Robert Gunzburg, Antwerpen, Belgium
- 13:05** European Spine Curriculum: A joint effort
Haluk Berk, Izmir, Turkey
- 13:15** EUROSPINE, the Spine Society of Europe/EUROSPINE foundation: European Spine Diploma and beyond
Jörg Franke, Dortmund, Germany
- 13:30** Round Table Discussion

14:00-15:20 ■ **Cervical Spine**
★☆☆☆ App-Rating
Room: Plenary Hall
Chairs: Tim Pigott, Liverpool, UK; Bernhard Meyer, Munich, Germany

- **9 PRE-VALIDATION PROCESS OF THE AO SUBAXIAL CERVICAL SPINE CLASSIFICATION SYSTEM**
Frank Kandziora, Alex Vaccaro, Bizhan Aarabi, Christopher Kepler, Kris Radcliff, Klaus Schnake, Luiz Vialle, Cumhur Oner, Marcel Dvorak, John Koerner, Michael Fehlings, Shanmuganathan Rajasekaran, Maximilian Reinhold
Berufsgenossenschaftliche Unfallklinik Frankfurt am Main
- **10 REVERSE POISSON'S EFFECT FOLLOWING DECOMPRESSION OF SPONDYLOTIC CERVICAL MYELOPATHY IN ACCORDANCE WITH OUTCOME**
Marin Stancic, Ivana Stancic, Petra Barl
University Hospital Center Zagreb
- **11 ADJACENT SEGMENTS PATHOLOGY REQUIRING SURGERY FOLLOWING ANTERIOR CERVICAL ARTHRODESIS - SURVIVORSHIP AND RISK FACTOR ANALYSIS OF 1038 PATIENTS -**
Jae Chul Lee, Sang-Hun Lee, Colleen Peters, K. Daniel Riew
Cervical Spine Service, Department of Orthopedic Surgery, Washington University School of Medicine, St. Louis, MO 63110, USA
- **12 FDA IDE CLINICAL TRIAL RESULTS THROUGH 48 MONTHS: ONE-LEVEL TDR VERSUS ACDF**
Jean-Paul Steib, Michael S.Hisey
(1) CHU Strasbourg, Strasbourg, France, (2) Texas Back Institute, Denton, TX USA

- **13** TWO-LEVEL ANTERIOR CERVICAL DISCECTOMY WITH FUSION: DOES ANTERIOR CERVICAL PLATE FIXATION INFLUENCE RADIOGRAPHIC AND PATIENT-RATED OUTCOMES?
Jan-Karl Burkhardt, Anne F Mannion, Serge Marbacher, Frank Kleinstück, Dezső Jeszenszky, François Porchet
Spine Center, Schulthess Clinic Zurich, Switzerland
- **14** POSTOPERATIVE FORAMINAL DIAMETER SHOULD BE MORE THAN 1.9 MM TO PREVENT IATROGENIC FORAMINAL STENOSIS AFTER CERVICAL PEDICLE SCREW FIXATION
Akiyoshi Yamazaki, Tomohiro Izumi, Yu Sato, Tatsuki Mizouchi, Ryuta Fujikawa
Niigata Central Hospital
- **15** A NEW ENTRANCE TECHNIQUE FOR C2 PEDICLE SCREW PLACEMENT AND THE USE IN PATIENTS WITH ATLANTOAXIAL INSTABILITY
Jiaming Liu¹, Jian Jiang², Zhili Liu¹, Xinhua Long¹, Wenzhao Chen¹, Yang Zhou¹, Song Gao¹, Laichan He², Shanhu Huang¹
¹)Department of Orthopedic Surgery, the First Affiliated Hospital of Nanchang University, Nanchang, 330006, P.R. China²)Department of Radiology, the First Affiliated Hospital of Nanchang University, Nanchang, 330006, P.R. China, Nanchang, China
- **16** POSITIONAL CHANGE OF HYOID BONE AFTER ANESTHESIA IN ANTERIOR SURGERY OF UPPER CERVICAL SPINE
Kwang-Bok Lee, Yong-Jin Kim, Joo-Rang Lee, In-Sung Huh, Seung-Min Choi, Kyung-Jin Song, Ki-Tae Park
Chonbuk National University Medical School, Chonbuk National University Hospital
- **17** PREVALENCE OF HIGH RIDING VERTEBRAL ARTERY AND MORPHOMETRY OF C2 VERTEBRA USING THE NEW CT RECONSTRUCTION TECHNIQUE
Thamrong Lertudomphonwanit, Praman Fuangfa, Phanunan Sasiprapha, Wiwat Wajanavisit, Supaneewan Jaovisidha
Department of Orthopaedics, Faculty of Medicine Ramathibodi Hospital, Mahidol University
- **18** PICA END VERTEBRAL ARTERY: NORMAL VARIATION AND POTENTIAL RISK FOR CERVICAL INSTRUMENTATION
Takeshi Aoyama, Naoshi Obara
Spine Center, Department of Orthopaedic Surgery, Teine Keijinkai Hospital, Sapporo, Japan

15:20-15:50 ■ **BREAK**

15:50-17:30 ■ **Thoraco-Lumbar Spine, Non Degenerative**

★★★★☆ App-Rating

Room: Plenary Hall

Chairs: Cédric Barrey, Lyon France; Antonio Faundez, Geneva, Switzerland

- **19** SURGICAL CORRECTION OF POSTTRAUMATIC SHARP ANGULAR KYPHOSIS WITH PVCR
Meric Enercan, Sinan Kahraman, Mesut Kilic, Faik Seckin, Cagatay Ozturk, Mercan Sarier, Ahmet Alanay, Azmi Hamzaoglu
Istanbul Spine Center

- **20 VERTEBROPLASTY WITH POSTERIOR SPINAL FUSION FOR PSEUDOARTHROSIS OF OSTEOPOROTIC THORACO-LUMBAR VERTEBRAL FRACTURE: A PROSPECTIVE MULTICENTER STUDY**
Keiichi Katsumi, Toru Hirano, Kei Watanabe, Masayuki Ohashi, Naoto Endo, Akiyoshi Yamazaki, Takui Ito, Kimihiko Sawakami, Atsuki Sano, Ren Kikuchi
Niigata University Medical and Dental General Hospital

- **21 A COMPARISON BETWEEN UNILATERAL TRANSVERSE PROCESS-PEDICLE AND BILATERAL PUNCTURE TECHNIQUES IN PERCUTANEOUS KYPHOPLASTY**
Dingjun Hao, Baorong He, Liang Yan
Spine Surgery, Xi'an, China

- **22 APOPTOSIS AND AUTOPHAGY IN THERAPEUTIC HYPOTHERMIA AFTER SPINAL CORD INJURY IN RAT**
Jun-Yeong Seo, Young-Hoon Kim, Kee-Yong Ha
Jeju National University Hospital

- **23 UPREGULATION OF RIP3 EXPRESSION AND INVOLVEMENT OF NECROPTOSIS IN NEURAL TISSUE DAMAGE AFTER SPINAL CORD INJURY**
Haruo Kanno, Hiroshi Ozawa, Satoshi Tateda, Kenichiro Yahata, Eiji Itoi
Department of Orthopaedic Surgery, Tohoku University School of Medicine

- **24 REMNANT PAIN AFTER VERTEBROPLASTY IN OSTEOPOROTIC VERTEBRAL COMPRESSION FRACTURE: ROLE OF ZYGOAPOPHYSIAL JOINT**
Gyu Yeul Ji, Chang Hyun Oh, Won-Seok Choi, Dong Ah Shin, Young Sul Yoon, Keung Nyun Kim
Department of Neurosurgery, Guro Teun Teun Hospital, Seoul, Korea; Department of Neurosurgery, 3Spine and Spinal Cord Research Institute, Yonsei University College of Medicine, Seoul, Korea

- **25 IS POST-TRAUMA DISC DEGENERATION AGGRAVATED BY LOADING OR MONO-NUCLEAR CELL HOMING?**
Stephen Ferguson, Davide Boffa, Stefan Dudli
ETH Zurich, Institute for Biomechanics, Switzerland

- **26 LONG-TERM OUTCOMES IN PRIMARY, SPINAL OSTEOCHONDROMA: A MULTICENTER STUDY OF 27 PATIENTS**
Peter Varga, Mohamed Macki, Mohamad Bydon, Daniel Sciubba, Jean-Paul Wolinsky, Charles Fisher, Jeremy Reynolds, Laurence Rhines, Dean Chou, Zsolt Szövérfi, Ziya Gokaslan
AOSpine International

- **27 HEMANGIOMAS OF THE SPINE: RESULTS OF SURGICAL MANAGEMENT AND PROGNOSTIC VARIABLES FOR LOCAL RECURRENCE AND MORTALITY IN A MULTICENTER STUDY**
Christina L. Goldstein, Peter Pal Varga, Ziya L. Gokaslan, Stefano Boriani, Alessandro Luzzati, Laurence D. Rhines, Charles G. Fisher, Dean Chou, Nasir A. Quraishi, Michael G. Fehlings
Nottingham University Hospital NHS Trust, Centre for Spinal Studies & Surgery, Queen's Medical Centre campus, UK

- **28** VALIDATION OF THE SPINAL INSTABILITY NEOPLASTIC SCORE (SINS); A RETROSPECTIVE ANALYSIS
Anne Versteeg, Cumhur Oner, Charles Fisher, Jorrit-Jan Verlaan
University Medical Center Utrecht, University of British Columbia, Blusson Spinal Cord Centre
- **29** PALLIATIVE SURGERY IMPROVES PAIN AND QUALITY OF LIFE IN MULTIPLE MYELOMA PATIENTS WITH SPINAL OSTEOLYTIC LESIONS
Panagiotis Korovessis, Vasileios Syrimpeis, Vasilis Vitsas, Panagiotis Zikos, Peter Fennema
General Hospital of Patras, Greece
- **30** THE USE OF INTRAOPERATIVE CELL SALVAGE IN METASTATIC SPINE TUMOUR SURGERY: CHALLENGING AN OLD MYTH
Naresh Kumar, Aye Sandar Zaw, Qasim Ahmed, Victor Lee, Raymond Goy, Hee-Kit Wong
National University Health System

17:30

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Mr. Michael Wong, Royal Melbourne Hospital - Australia

Scientific Programme

Thursday, October 2, 2014



Thursday, October 2, 2014

08:30-10:00

☆☆☆☆ App-Rating

Degenerative, Scoliosis

Room: Plenary Hall

Chair: Jörg Franke, Dortmund, Germany; Marco Brayda-Bruno, Milan, Italy

- **31** IMPACT OF PELVIC INCIDENCE ON THE SAGITTAL LUMBO-PELVIC ALIGNMENT IN STANDING-UP FROM A SITTING POSITION
Hidekazu Suzuki, Kenji Endo, Hirosuke Nishimura, Hidetoshi Tanaka, Takaaki Shishido, Kengo Yamamoto
Department of Orthopedic Surgery, Tokyo Medical University
- **32** LOWER LUMBAR CURVE IS MORE IMPORTANT FOR OPTIMAL SAGITTAL SPINO-PELVIC ALIGNMENT IN ADULT SPINAL DEFORMITY
Tatsuya Yasuda, Tomohiko Hasegawa, Yu Yamato, Sho Kobayashi, Daisuke Togawa, Hideyuki Arima, Yukihiro Matsuyama
Hamamatsu Univ. School of Medicine
- **33** PEDICLE SCREW INSERTION ACCURACY USING O-ARM, ROBOTIC GUIDANCE OR FREEHAND TECHNIQUE: A COMPARATIVE STUDY
Pietro Aniello Laudato, Katarzyna Pierzchala, Constantin Schizas
CHUV (Centre Hospitalier Universitaire Vaudois); Clinique Cecil
- **34** PREOPERATIVE PLANNING AND PATIENT SPECIFIC RODS FOR SURGICAL TREATMENT OF THORACOLUMBAR SPINE IMBALANCE.
Vincent Fiere, Marc Szadkowski, Alexis Faline
Centre orthopédique Santy - Spinal surgery
- **35** ASSOCIATION OF VERTEBRAL BONE MARROW EDEMA WITH LOW BACK PAIN IN DEGENERATIVE LUMBAR SCOLIOSIS IN THE ELDERLY: CROSS-SECTIONAL OBSERVATIONAL STUDY
Kiyotaka Yamada, Yoshinori Fujimoto, Toshio Nakamae, Osami Suzuki, Takashi Hashimoto, Masaki Matsuura, Taiki Morisako
Hiroshima General Hospital
- **36** CORRELATION BETWEEN FUNCTIONAL OUTCOMES AND SAGITTAL BALANCE FOR PATIENTS WHO UNDERWENT A SHORT LUMBAR SPINE FUSION: A 4 YEARS PROSPECTIVE STUDY.
Ahmed Benzakour, Cedric Maillot, Antoine Fourgeaux, Hugues Demezou, Stephane Aunoble, Jean-Charles Le Huec
Deterca Bordeaux University
- **37** CLINICAL TOLERANCE TO SAGITTAL IMBALANCE VARIES WITH AGE
Ferran Pellisé, Alba Vila-Casademunt, Montse Domingo-Sabat, Joan Bagó, Ahmet Alanay, Ibrahim Obeid, Francisco J Sánchez Pérez-Grueso, Emre Acaroglu, ESSG European Spine Study Group
Hospital Universitari Vall Hebron; Acibadem Maslak Hospital; Pellegrin Hospital; Hospital Universitario La Paz; Ankara Spine Center

- **38** GLOBAL TILT: A SINGLE PARAMETER INCORPORATING THE SPINAL AND PELVIC SAGITTAL PARAMETERS AND LEAST AFFECTED BY PATIENT POSITIONING
Louis Boissière, Ibrahim Obeid, Jean-Marc Vital, Frank Kleinstück, Ferran Pellisé Urquiza, Francisco J. Sanchez Perez-Gruoso, Ahmet Alanay, Emre Acarolu, ESSG Bordeaux University Hospital, Spine Unit

- **39** POSTOPERATIVE SPINE AND SPINAL IMPLANTS INSTABILITY AS COMPLICATIONS OF TREATMENT OF THE RIGID SCOLIOTICAL DEFORMATION IN ADULT AND ELDERLY PATIENTS.
*Dmitry Ptashnikov, Dmitry Mikhaylov, Sergey Masevnnin
Vreden Russian Research Institute of Traumatology and Orthopedics*

- **40** A LOGISTIC REGRESSION MODEL TO PREDICT COMPLICATIONS IN COMPLEX DEFORMITY SPINE SURGERY
*Ferran Pellisé, Alba Vila-Casademunt, Lidia Mora, Maria José Colomina, Montse Domingo-Sàbat, Ibrahim Obeid, Francisco J Sanchez Perez-Gruoso, Ahmet Alanay, Emre Acaroglu, ESSG European Spine Study Group
Hospital Universitari Vall Hebron; Hopital Pellegrin; Hospital Universitario La Paz; Acibadem Maslak Hospital; Ankara Spine Center*

- **41** SAFETY AND EFFICACY OF OSTEOTOMIES IN ADULT SPINAL DEFORMITY (ASD): WHAT HAPPENS IN THE FIRST YEAR ?
Emre Acaroglu, Selim Ayhan, Bilal Aykac, Selcen Yuksel, Umit Ozgur Guler, Ferran Pellisé, Ahmet Alanay, Francisco J. Sanchez Perez-Gruoso, European Spine Study Group Ankara Spine Center, Ankara, Turkey; Department of Biostatistics, Yildirim Beyazit University, Ankara, Turkey; Hospital Universitari Vall d'Hebron, Barcelona, Spain; Acibadem Maslak Hospital, Istanbul, Turkey; Hospital Universitari La Paz, Madrid, Spain

10:00-10:30 ■ **BREAK**

10:30-12:00 ■ **Presidential Address, Medal and Awards Lectures**

Room: Plenary Hall

Chair: Everard Munting, Biez, Belgium; Haluk Berk, Izmir, Turkey

10:30 ■ **Winner of the 2014 EUROSPINE Full Paper Award**

IMPACT ON HEALTH RELATED QUALITY OF LIFE OF ADULT SPINAL DEFORMITY (ASD) COMPARED WITH OTHER CHRONIC CONDITIONS

Ferran Pellisé¹, Alba Vila-Casademunt², Montse Ferrer³, Montse Domingo-Sàbat², Juan Bago¹, Francisco J Sanchez Perez-Gruoso⁴, Ahmet Alanay⁵, Anne F Mannion⁶, Emre Acaroglu⁷, ESSG European Spine Study Group

*¹) Spine Surgery Unit, Hospital Vall d'Hebron, Barcelona, Spain; ²) Spine Research Unit, Vall d'Hebron Institute of Research, Barcelona, Spain; ³) Health Services Research Group, IMIM (Hospital del Mar Medical Research Institute), Barcelona, Spain; ⁴) Spine Surgery Unit, Hospital Universitario La Paz, Madrid, Spain; ⁵) Spine Surgery Unit, Acibadem University, Istanbul, Turkey; ⁶) Spine Center, Schulthess Klinik, Zürich, Switzerland, ⁷) Spine Surgery Unit, Ankara Spine Center, Ankara, Turkey
Abstract no 63 in the ESJ Abstract Supplementum and Index*

10:40 ■ **Winner of 2013/2014 Grammer/European Spine Journal Award**

MICROARRAY EXPRESSION PROFILING IDENTIFIES GENES WITH ALTERED EXPRESSION IN ADOLESCENT IDIOPATHIC SCOLIOSIS

*Khaled Fendri, Shunmoogum A. Patten, Gabriel N. Kaufman, Charlotte Zaouter, Stefan Parent, Guy Grimard, Patrick Edery, Florina Moldovan
Eur Spine J (2013) 22:1300-1311*

- 10:50** ■ **EUROSPINE Presidential Address: An Unsystematic Review**
Phil Sell, Leicester, UK
- 11:25** ■ **EUROSPINE Medal Lecture 2014**
The Future and What To Do About It
Mark Stevenson, UK, Author, Ideas Generator and Futurist
Questions, Discussion
- 12:00-14:00** ■ **EUROSPINE LUNCH SYMPOSIUM, Thursday October 2**
- 12:00** ■ **EUROSPINE LUNCH SYMPOSIUM 3**
★☆☆☆ App-Rating
Auditorium Lumière
Economic Evaluations in Spinal Medicine
Chair: Norbert Boos, Zurich, Switzerland
- 12:15** Introduction
Norbert Boos, Zurich, Switzerland
- 12:20** Methodological Approaches for Economic Studies in Spinal Medicine
Emma McIntosh, Glasgow, Scotland
- 12:40** Discussion
- 12:45** Economic Studies in Spinal Medicine? What Did We Learn So Far?
Jeremy Fairbank, Oxford, UK
- 13:20** Discussion
- 13:25** Value-Based Spinal Health Care - What We Can Do to Change Spinal Medicine
Norbert Boos, Zurich, Switzerland
- 13:50** Discussion
- 13:55** Concluding Remarks
Norbert Boos, Zurich, Switzerland, Jeremy Fairbank, Oxford, UK

14:00-15:20 ■ **Thoraco-Lumbar Spine, Degenerative II**
★☆☆☆ App-Rating
Room: Plenary Hall
Chairs: Lester Wilson, London, UK; Finn Christensen, Aarhus, Denmark

- **42 IDENTIFICATION OF OUTCOME PREDICTORS AND THE AT-RISK SUBGROUP IN PATIENTS REQUIRING SURGICAL TREATMENT BECAUSE OF LUMBAR DISC DEGENERATION**
Aron Lazary, Istvan Klemencsics, Peter E. Eltes, Peter Paul Varga
National Center for Spinal Disorders, Budapest, Hungary



- **43 COMT GENE POLYMORPHISM IS ASSOCIATED WITH BASELINE DISABILITY BUT NOT LONG TERM TREATMENT OUTCOME IN PATIENTS WITH CHRONIC LOW BACK PAIN**
Jens Ivar Brox, Ahmad Omair, Marit Holden, Anne F Mannion, Peter Fritzell, Olle Hagg, Jeremy Fairbank
Oslo University Hospital, Norway and Spine Unit Schulthess Klinik Zürich, Switzerland
- **44 DECOMPRESSION ALONE IS EFFECTIVE FOR LUMBAR SPINAL STENOSIS WITH DEGENERATIVE SPONDYLOLISTHESIS: SLIP PROGRESSION IS INEVITABLE, BUT CEASES 1 YEAR AFTER SURGERY.**
Akira Miyauchi, Tadayoshi Sumida, Bunichiro Izumi
Dept. of Orthopaedic Surgery, Hiroshima City Asa Hospital

- **45** POSSIBILITIES OF HIGH FIELD MRI FOR THE DETECTION OF INTERVERTEBRAL DISC LESIONS A COMPARISON BETWEEN 11.7 T AND 3 T

Nikolaus Berger-Roscher¹, Fabio Galbusera^{1,2}, Volker Rasche³, Hans-Joachim Wilke¹

¹) Institute of Orthopaedic Research and Biomechanics, Centre of Musculoskeletal Research Ulm, University Hospital Ulm, Ulm, Germany; ²) IRCCS Istituto Ortopedico Galeazzi, Milan, Italy; ³) Department of Internal Medicine II, University Hospital Ulm, Ulm, Germany; ⁴) Small Animal MRI, Medical Faculty, Ulm University, Ulm, Germany

- **46** PREOPERATIVE RETROLISTHESIS IS A RISK FACTOR OF LUMBAR DISC HERNIATION AFTER FENESTRATION WITHOUT DISCECTOMY

Shota Takenaka, Noboru Hosono, Yoshihiro Mukai, Kosuke Tateishi, Takeshi Fuji
Osaka Kosei-nenkin Hospital

- **47** IS IT USEFUL THE USE OF CORTICOID TREATMENT FOR POST OPERATIVE PAIN MANAGEMENT AFTER DISC HERNIATION SURGERY?

Gemma Vila Canet, Augusto Covaro, Ana Garcia de Frutos, M.Teresa Ubierna Garcés, Enric Cáceres Palou
Hospital Universitari Quiron-Dexeus, Barcelona

- **48** ANTIBIOTIC USE IN CHRONIC BACK PAIN, WHAT ARE WE TREATING?

TAOFIQ Desmond SANUSI, Irfan Malik
Neurosurgery department, Kings College Hospital, London

- **49** THE COMPARISON OF 2 SURGICAL TREATMENTS FOR LUMBAR STENOSIS WITH DEGENERATIVE SCOLIOSIS IN 6-YEAR MINIMUM FOLLOW-UP

Dingjun Hao, Baorong He, Liang Yan
Spine Surgery, Xi'an, China

- **50** DOES THE DURATION OF PREOPERATIVE CONSERVATIVE THERAPY IN DEGENERATIVE LUMBAR SPINAL STENOSIS HAVE AN INFLUENCE ON THE OUTCOME IN MICROSURGICAL DECOMPRESSION?

Thomas Zweig, Martin Jäger, Emin Aghayev, Markus Melloh, Christoph Röder
Aarau Central Hospital, Switzerland

- **51** INTERSPINOUS PROCESS DEVICES VERSUS STANDARD CONVENTIONAL SURGICAL DECOMPRESSION FOR LUMBAR SPINAL STENOSIS: COST UTILITY ANALYSIS

Wouter Moojen, Elske van den Akker, Mark Arts, Carmen Vleggeert-Lankamp, Wilco Peul
Leiden University Medical Center

15:20-15:50 ■ **BREAK**

15:50-16:35 ■ **Debate**

★★★★☆ App-Voting

Room: Plenary Hall

15:50 ■ **Debate: I always stop at L5**

Moderator: Josef Grohs, Vienna Austria

Rune Hedlund, Gothenburg, Sweden: I never fuse to the sacrum

Pierre Roussouly, Lyon, France: I always fuse to the sacrum

- 16:45** ■ **EUROSPINE GENERAL ASSEMBLY**
Plenary Hall - Members only
- 19:30** ■ **OFFICIAL CONGRESS EVENING**
(At own expense)
Attire: business/formal

2014 EUROSPINE Research Grant Recipients

EUROSPINE would like to congratulate the following 2014 grant recipients:

■ Validation of appropriateness criteria for the surgical treatment of lumbar degenerative spondylolisthesis (LDS)

Anne Frances Mannion, François Porchet, John-Paul Vader
Spine Unit, Schulthess Klinik, Zurich, Switzerland
100.000€/3yrs study

■ A Randomised Controlled Trial of Multimodal Physiotherapy for Patients with Acute / Sub-acute Cervical Radiculopathy)

Louise Keating, Catherine Doody, Ciaran Bolger
Royal College of Surgeons in Ireland, Stephen's Green, Dublin, Ireland
30.000€/1 year

■ Development Grants: 10.000€/each

When evaluating requests for funding we sometimes receive applications that propose to investigate an interesting and valuable topic, yet the actual research design is under-developed. The TFR obviously cannot recommend direct funding in such cases, but it can award a Development Grant. This is intended to provide funds for the applicants to do essential development work on their proposal, based on the feedback from the TFR reviewers. It is expected that a revised application will be re-submitted to EUROSPINE/TFR.

■ Optimal pre-surgical management for persons who undergo spinal fusions surgery. Incorporating an evidence based rehabilitation approach in an RCT

Mari Lundberg, Rob Smeets, Helena Brisby
Lundberg Laboratory for Orthopaedics Research, Sahlgrenska University, Gothenburg, Sweden

■ Impact of cervical alignment in the surgical treatment of cervical spondylotic myelopathy

Zachary Adam Smith, Avinash Patwardhan, Michael Zindrick, Tyler Koski, Irene B. Helenowski
Northwestern University, Feinberg School of Medicine and Edward Hines VA Hospital, Chicago, IL, USA

■ Improving treatment of effectiveness in chronic low back pain

Rob Smeets, Jeroen de Jong, Mariell Goossens, Ivan Huijnen, Alber Köke
Department of Rehabilitation Medicine Maastricht University Medical Centre (MUMC), Maastricht, the Netherlands

■ PH-Sensitive release systems to reduce disc inflammation

Karin Wuertz-Kozak, Stephen Ferguson, Jeffrey Bode, Institute for Biomechanics, Swiss Federal Institute of Technology (ETH) Zurich, Switzerland

■ Congratulations!

The EUROSPINE Task Force on Research
Margareta Nordin, France (chair)
Federico Balagué, Switzerland – Kim Burton, UK – Christine Cedraschi, Switzerland - Marek Szapalski, Belgium – Pierre Côté, Canada - Björn Rydevik, Sweden

Grant Applications 2015

■ EUROSPINE will again fund grants in 2015

The overall purpose of the EUROSPINE TFR is to promote high quality research in clinical and non-clinical studies related to spine disorders, and to administer the research funds allocated by the Society in the form of grants to support this research.

All instructions for an application are to be found on the website EUROSPINE Research:
www.eurospine.org/research

Not funded are case series or product development.

The applicant or at least one member of the research team must be a member of EUROSPINE.

Applications must be sent by e-mail to info@eurospine.org

Application deadline: January 31, 2015

For more information please visit the EUROSPINE Society Booth in the center of the Exhibition area.

GLOBUS MEDICAL PRESENTS LUNCH SYMPOSIA

RESTORATION OF LUMBAR LORDOSIS WITH EXPANDABLE TECHNOLOGIES

Presented by Dr. Dean Chou and Mr. Paul Rhys Davies

Wednesday, 1 October | 12:00 – 14:00 | Room Tête d'Or 2



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RESTORING SAGITTAL BALANCE: COMPLICATIONS IN ADULT DEFORMITIES

Presented by Professor Rune Hedlund and Dr. Martin Gehrchen

Thursday, 2 October | 12:00 – 14:00 | Room Tête d'Or 2

VISIT US AT
BOOTH B26

For more information, visit us at international.globusmedical.com

Globus Medical Sàrl
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Scientific Programme

Friday, October 3, 2014



Friday, October 3, 2014

08:30-10:00

★ ★ ★ ☆ App-Rating

Growing Spine

Plenary Hall

Chairs: Ferran Pellisé, Barcelona, Spain; Ibrahim Obeid, Bordeaux, France



- **52** DIFFERENTIAL RESPONSE OF NOTOCHORDAL AND MATURE NUCLEUS PULPOSUS CELLS TO PATHOLOGICAL STIMULI
Taryn Saggese, Kelly Wade, Ashvin Thambyah, Sue McGlashan
University of Auckland, New Zealand
- **53** THE DEVELOPMENT OF THE ISCHIO-ILIAC LORDOSIS DURING GROWTH AS AN ESSENTIAL ADAPTATION TOWARDS HUMAN BIPEDALISM AND A DETERMINANT OF SAGITTAL BALANCE.
Tom Schlösser, Michiel Janssen, Tomaz Vrtovec, Franjo Pernus, Cumhur Öner, Max Viergever, Koen Vincken, René Castelein
University Medical Center Utrecht, Utrecht, The Netherlands
- **54** A RADIOGRAPHIC ANALYSIS OF CERVICAL AND PELVIC PARAMETERS FOLLOWING SEGMENTAL CORRECTION OF SCHEUERMANN'S KYPHOSIS
Hossein Mehdian, Georgios Arealis, Sherief Elsayed, Oliver Stokes, Nasir Quraishi
The Centre for Spinal Studies and Surgery, Queens Medical Centre, Nottingham, United Kingdom
- **55** USING CONCAVE SIDE-BENDING RADIOGRAPHS TO DETERMINE THE DISTAL FUSION LEVEL IN IDIOPATHIC SCOLIOSIS PATIENTS UNDERGOING POSTERIOR CORRECTION WITH PEDICLE SCREWS: A PROSPECTIVE STUDY WITH MINIMUM 5 YEARS FOLLOW-UP.
Jinqian Liang, Jianxiong Shen, Sooyong Chua
Orthopedic department, Peking Union Medical College Hospital
- **56** DOES IT MAKE A DIFFERENCE TO STOP FUSION AT L3 VERSUS L4 IN TERMS OF DISC AND FACET JOINT DEGENERATION : AN MRI STUDY WITH MINIMUM 5 YEARS FOLLOW UP
Meric Enercan, Sinan Kahraman, Tunay Sanli, Mesut Kilic, Faik Seckin, Levent Ulusoy, Cagatay Ozturk, Ahmet Alanay, Azmi Hamzaoglu
Istanbul Spine Center
- **57** CLINICAL AND RADIOGRAPHIC RESULTS IN THORACIC HIPERKYPHOSIS SURGICAL TREATMENT CONSIDERING THE OPTIMAL FUSION AREA
Laura Scaramuzzo, Fabrizio Giudici, Luca Proietti, Francesco Ciro Tamburrelli, Leone Minoia, Marino Archetti, Sergio Sessa, Carlo Ambrogio Logroscino, Antonino Zagra
I.R.C.C.S. Galeazzi Orthopedic Institute, Catholic University
- **58** HEMIVERTEBRA RESECTION COMBINED WITH WEDGE OSTEOTOMY FOR THE TREATMENT OF SEVERE RIGID CONGENITAL KYPHOSCOLIOSIS IN ADOLESCENCE
Ding-Jun Hao, Zhong-Kai Liu
Hong Hui Hospital, Xi'an Jiaotong University

- **59** PONTE OSTEOTOMIES IN THE TREATMENT OF MAJOR THORACIC ADOLESCENT IDIOPATHIC SCOLIOSIS

Javier Pizones, Felisa Sánchez-Mariscal, Lorenzo Zúñiga, Patricia Álvarez, Ángeles Rodrigo, Enrique Izquierdo
Spine Unit. Hospital Universitario de Getafe, Madrid, Spain

- **60** INSTRUMENTATION OF SCOLIOSIS WITH DUCHENNE'S MUSCULAR DYSTROPHY: IS A SINGLE ROD CONSTRUCT SUFFICIENT?

Derek Cawley, Olan Carmody, Michael K Dodds, Damian McCormack
Temple St Children's University Hospital, Dublin, Ireland

- **61** SELF IMAGE, PAIN AND FUNCTION 35 YEARS AFTER IN SITU ARTHRODESIS FOR L5-S1 HIGH-GRADE ISTHMIC SPONDYLOLISTESIS

Karin Frennered, Anders Joelsson, Christer Johansson, Rune Hedlund
Institute of Clinical Sciences at Sahlgrenska Academy, University of Gothenburg and Sahlgrenska University Hospital, Gothenburg, Sweden

- **62** COMPARISON OF STAINLESS STEEL AND TITANIUM METALWORK INFECTION RATES IN SCOLIOSIS SURGERY

Martin Connolly, Brian Hanratty, Kyle McDonald, Niall Eames, Alistair Hamilton, Eugene Verzin, Gregory McLorinan
Royal Victoria Hospital, Belfast, Northern Ireland

10:00-10:30 ■ BREAK

10:30-12:00

★ ★ ★ ☆ ☆ App-Voting

- **The 'Best of Show' papers. The highest scored abstract submissions**

The 2014 Best Podium Award will be evaluated out of the seven presentation of this session.

The audience is asked to vote via the EUROSPINE App
Plenary Hall

Chairs: Thomas Blattert, Schwarzach, Germany; Margareta Nordin, Romorantin, France

- **64** DETERMINANTS OF LUMBAR CURVE BEHAVIOUR IN LENKE TYPE I A&B THORACIC ADOLESCENT IDIOPATHIC SCOLIOSIS TREATED BY POSTERIOR SPINAL FUSION

Mahmoud Elmalky, George Arealis, Michael Grevitt
Centre for Spinal Studies & Surgery, Queen's Medical Centre Campus, Nottingham University Hospitals NHS Trust, Nottingham, UK

- **65** COMPARISON OF OUTCOMES BETWEEN PATIENTS USING SSEP/TCMEP MONITORING DURING PVCR PROCEDURE AND NO MONITORING IN A SINGLE CENTER: DOSE MONITORING TRULY DETECT ALL SPINAL CORD ABNORMALITIES AND IMPROVE RADIOGRAPHIC CORRECTION?

Yingsong Wang, Jingming Xie, Tao Li, Ying Zhang, Ni Bi, Zhi Zhao, Leijie Chen, Zhou Liu, Zhiyue Shi
Department of Orthopedics, The 2nd Affiliated Hospital of Kunming Medical University, Yunnan Province, China



- **66** PFIRRMANN GRADE AS A PREDICTOR OF RANGE AND QUALITY OF MOTION

Avinash Patwardhan, Muturi Muriuki, Robert Havey, Leonard Voronov, Gerard Carandang Edward Hines Jr. VA Hospital, Musculoskeletal Biomechanics Laboratory, Hines, IL, USA

- **67** SURGICAL INTERSPINOUS IMPLANT VERSUS CONVENTIONAL DECOMPRESSION FOR LUMBAR SPINAL STENOSIS - A RANDOMIZED CONTROLLED TRIAL LONG-TERM RESULTS

*Wouter Moojen, Mark Arts, Wilco Jacobs, Carmen Vleggeert-Lankamp, Wilco Peul
Leiden University Medical Center, Leiden, the Netherlands*

- **68** NO BENEFIT FROM FUSION IN DECOMPRESSIVE SURGERY FOR LUMBAR SPINAL STENOSIS. 2 YEAR-RESULTS FROM THE SWEDISH SPINAL STENOSIS STUDY, A MULTICENTERRCT OF 229 PATIENTS

*Peter Försth, Thomas Carlsson, Karl Michaëlsson, Bengt Sanden
Stockholm Spine Center, Stockholm, Sweden*

- **69** PROGNOSTIC VARIABLES FOR LOCAL RECURRENCE AND OVERALL SURVIVAL AFTER SURGICAL TREATMENT OF SACRAL CHORDOMA AN ANALYSIS FROM AOSPINE TUMOR KNOWLEDGE FORUM PRIMARY SPINAL TUMOR RETROSPECTIVE DATABASE
*Péter Pál Varga, Zsolt Szövérfi, Ziya Gokaslan, Charles Fisher, Stefano Boriani, Mark Dekutoski, Dean Chou, Nasir Quraishi, Michael Fehlings, Laurence Rhines
Spinal Surgery, National Center for Spinal Disorders, Budapest, Hungary*

- **70** DOES INTRAWOUND APPLICATION OF VANCOMYCIN INFLUENCE BONE HEALING IN SPINAL SURGERY?

*Claudia Eder, Stefan Schenk, Jana Trifinopoulos, Sabrina Schildboeck, Melanie Kienzl, Michael Ogon
3rd Orthopedic Department, Orthopedic Hospital Vienna, Vienna, Austria*

■ **UPDATE ON SOCIETY ACTIVITIES**

11:30

EUROSPINE Activities
Philip J. Sell, Leicester, UK. EUROSPINE President

11:35

Activities of the Task Force on Research
Margareta Nordin, Romorantin, France. Chair of the Task Force Research

11:40

Spine Tango, the EUROSPINE Registry
Tim Pigott, Liverpool, UK, Chair of the Spine Tango Committee

11:45

Activities of the Membership Committee
Christoph Siepe, Munich, Germany, Chair of the Membership Committee

11:50

Announcement of the Best Podium Award
Thomas Blattert, Margareta Nordin

12:00-14:00 ■ EUROSPINE LUNCH SYMPOSIA, Friday October 3

12:00 ■ EUROSPINE LUNCH SYMPOSIUM 4

★★★★☆ App-Rating

Room Rhône 3A/3B

Pyogenic Spinal Infections

Chair: Viola Bullmann, Koeln, Germany

12:00 Spondylitis- Diagnostic Tools

Jörg Franke, Dortmund, Germany

12:20 Discussion

12:30 Iatrogenic infections – How to treat?

Ferran Pellisé, Barcelona, Spain

12:50 Discussion

13:00 Patient's outcomes after surgical site infections

Susana Núñez Pereira, Koeln, Germany

13:20 Discussion

13:30 Surgical treatment of pyogenic spinal infections

Viola Bullmann, Koeln, Germany

13:50 Discussion

12:00 ■ EUROSPINE LUNCH SYMPOSIUM 5

★★★★☆ App-Rating

Auditorium Lumière

Overcoming Obstacles to Recovery in the Lumbar Spine

Chair: Phil Sell, Leicester, UK

"Yellow flags", obstacles to recovery

Phil Sell, Leicester, UK

Combined physical and psychological approach

John O'Dowd, London, UK

Helping the challenging patient

Christine Cedraschi, Geneva, Switzerland

Top tips for improving quality of life for patients and surgeons

Phil Sell, Leicester, UK

Discussion

12:00 ■ EUROSPINE LUNCH SYMPOSIUM 6

★★★★☆ App-Rating

Auditorium Pasteur

Ankylosing Spondylitis (focus on diagnosis and medical treatment)

Chair: Federico Balagué, Fribourg, Switzerland

Frequency of spondylarthropathies and the missed diagnoses

Thomas Blattert, Schwarzach, Germany

Medical pitfalls and manifestations

Jean Dudler, Fribourg, Switzerland

Conservative Treatments

Federico Balagué, Fribourg, Switzerland

Corrective Spinal Osteotomies in Ankylosing Spondylitis

Hossein Mehdi, Nottingham, UK

Discussion

14:00 ■

Growing Spine

Room Rhône 2, Level Rhône/Pasteur

Chairs: Alpaslan Senköylü, Ankara, Turkey, Jean-Charles LeHuec, Bordeaux, France

- **QF1** A NEW RADIOLUCENT DEDICATED CHAIR FOR SITTING-POSTURE RADIOGRAPHS IN NON-AMBULATORY PATIENTS: APPLICATION WITH THE EOS SYSTEM
Houssam Bouloussa, Arnaud Dubory, Catherine Seiler, Hubert Ducou le Pointe, Raphaël Vialle
Université Pierre et Marie Curie-Paris6, Armand Trousseau Hospital, Department of Pediatric Orthopaedics & Department of Pediatric Imaging, 26 avenue du Docteur Arnold Netter, Paris, France; Groupe Lagarrigue, 131 boulevard Victor Hugo, F 92110 Clichy France
- **QF2** COMPARISON OF SIMPLIFIED OLECRANON AND DIGITAL METHODS OF SKELETAL MATURITY ASSESSMENT
Yann Philippe Charles, Federico Canavese, Sébastien Schuller, Jean-Paul Steib, Marie Rousset, Alain Diméglio
Department of Spine Surgery, Hôpitaux Universitaires de Strasbourg, France and Department of Pediatric Surgery, CHU Clermont-Ferrand, France
- **QF3** PROSPECTIVE STUDY WITH IMMEDIATE IN-BRACE CORRECTION OF THE FIRST 150 SCOLIOSIS TREATED WITH THE NEW LYON BRACE (ARTBRACE).
Jean Claude de Mauroy, Cyril Lecante, Frédéric Barral, Sophie Pourret
Clinique du Parc - Lyon
- **QF4** LOW BACK PAIN AND PATIENT-BASED QOL OUTCOMES IN PATIENTS WITH ADOLESCENT IDIOPATHIC SCOLIOSIS WITHOUT CORRECTIVE SURGERY
Takahiro Makino, Takashi Kaito, Masafumi Kashii, Motoki Iwasaki
Dept. Orthopaedic Surgery, Graduate School of Medicine, Osaka University
- **QF5** IS SHOULDER IMABALANCE AS IMPORTANT AS IT IS CONSIDERED IN IDIOPATHIC SCOLIOSIS PATIENTS?
Elisabetta D'Agatta, Joan Bago, Ferran Pellise
Hospital Vall d'Hebron, Spain
- **QF6** INCIDENCE OF FALSE POSITIVE SPINAL CORD MONITORING ALERTS IN SURGERY FOR EARLY ONSET SCOLIOSIS
Oliver Stokes, Ed Bayley, Rob Burton, Sherief Elsayed, Dominique Rothenfluh, Hossein Mehdian
Centre for Spinal Studies and Surgery, Queen's Medical Centre, Nottingham, U.K.
- **QF7** THE SAGITAL BALANCE CHALLENGE IN FUSIONLESS SURGERY: PJK PREDICTING FACTORS IN VEPTR TECHNIQUE
Norberto Ventura, augusto covaro, Anna Ey, inma vilalta, melisa stitzman
Hospital Sant Joan de deu, Barcelona
- **QF8** EFFICACY AND SAFETY OF GROWING SPINAL SYSTEMS IN THE TREATMENT OF HYPERKYPHOSIS IN EARLY ONSET DEFORMITY
Elena Maredi, Francesco Lolli, Kostantinos Martikos, Francesco Vommaro, Mario Di Silvestre, Stefano Giacomini, Adrea Baioni, Aristide Morigi, Renata Bacchin, Tiziana Greggì
Rizzoli Orthopaedic Institute Bologna Italy

- **QF9** EARLY ONSET SCOLIOSIS (INFANTILE IDIOPATHIC SCOLIOSIS) AND MAGNETICALLY CONTROLLED DUAL GROWING ROD
Tiziana Greggì, Elena Maredì, Francesco Lolli, Stefano Giacomini, Francesco Vommaro, Kostantinos Martikos, Mario Di Silvestre, Andrea Baioni
Rizzoli Orthopaedic Institute
- **QF10** MAGNETICALLY CONTROLLED GROWING RODS: AN EFFECTIVE AND LESS-INVASIVE SYSTEM FOR EARLY ONSET SCOLIOSIS TREATMENT.
Guido La Rosa, Laura Ruzzini, Leonardo Oggiano
Bambino Gesù Children's Hospital
- **QF11** SELECTIVE THORACIC FUSION PROVIDES SIMILAR HRQL BUT CAN CAUSE MORE LUMBAR DISC AND FACET JOINT DEGENERATION: A COMPARISON OF AIS PATIENTS WITH NORMAL POPULATION 10 YEARS AFTER SURGERY
Sinan Kahraman, Meric Enercan, Tunay Sanli, Bahadır Gokcen, Erden Erturer, Mercan Sarier, Cagatay Ozturk, Ahmet Alanay, Azmi Hamzaoglu
Istanbul Spine Center
- **QF12** SUBJECTIVE EVALUATION OF SURGICAL TREATMENT OF SURGICAL TREATMENT OF SPINE DEFORMITIES IN CHILDREN WITH SMA TYPES 2 AND 3A.
Tomasz Potaczek, Daniel Zarzycki, Barbara Jasiewicz
Department of Orthopedic Surgery and Rehabilitation, Jagiellonian University, Faculty of Medicine
- **QF13** DOES SPINAL FUSION AND SCOLIOSIS CORRECTION IMPROVE ACTIVITY AND PARTICIPATION FOR CHILDREN WITH ANGELMAN SYNDROME?
Charles Wallace, Mathew Sewell
The Royal National Orthopaedic Hospital
- **QF14** IMPROVEMENT OF SPINAL SAGITTAL PROFILE AFTER SCHEUERMANN'S KYPHOSIS CORRECTION SURGERY
Kai Tsang, Senthil muthian, Vinay Jasani, Jayesh Trivedi, Elnasri Ahmed
University Hospital of NorthStaffordshire, Stoke-on-Trent, UK; Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry, UK
- **QF15** ANALYSIS OF PERIOPERATIVE MAJOR NON-NEUROLOGIC COMPLICATIONS IN 105 POSTERIOR VERTEBRAL COLUMN RESECTION (PVCR) PROCEDURES FOR SEVERE RIGID DEFORMITIES DURING 10 YEARS: INTROSPECTION ON THE BALANCE BETWEEN PATIENTS' RISK AND BENEFIT
Jingming Xie, Yingsong Wang, Ying Zhang, Tao Li, Zhi Zhao, Zhou Liu, Ni Bi, Leijie Chen, Zhiyue Shi
Department of Orthopedics, The 2nd Affiliated Hospital of Kunming Medical University, Yunnan Province, China

14:00

- **Cervical Spine**
Room Rhône 3AB, Level Rhône/Pasteur
Chairs: Serdar Kahraman, Istanbul, TR; Baoge Liu, Beijing, China

- **QF16** NOVEL TECHNIQUE FOR THE TREATMENT OF TYPE II DENS FRACTURES WITH CEMENT AUGMENTATION & A BIOMECHANICAL EVALUATION
Albrecht Waschke¹, Nikolaus Berger-Roscher², Rolf Kalff¹, Hans-Joachim Wilke²
¹)Clinic and Polyclinic for Neurosurgery, University Hospital Jena, Jena, Germany;
²)Institute of Orthopaedic Research and Biomechanics, Centre of Musculoskeletal Research Ulm, Ulm University, Ulm, Germany

- **QF17** EVALUATION OF THE EFFICACY AND SAFETY OF SPINAL NAVIGATION IN CERVICAL (CPS) AND THORACIC PEDICLE SCREW (TPS) INSERTION: POTENTIAL DEFICITS IN SURGICAL SKILL ARE NOT ELIMINATED FOR CPS BUT SUCH DEFICITS ARE COMPENSATED FOR IN TPS.
Tokumi Kanemura, Kotaro Satake, Hidetoshi Yamaguchi, Yoshimoto Ishikawa, Akiyuki Matsumoto, Zenya Ito, Shiro Imagama
Konan Kosei Hospital, Spine Center

- **QF18** A SAFE CERVICAL PEDICLE SCREW INSERTION TECHNIQUE USING A DIRECT C-ARM VIEW OF THE PEDICLE MEDIAL CORTEX DURING A DANGEROUS PROBE INSERTION PROCEDURE.
Tadanori Ogata, Tadao Morino, Hideki Horiuchi, Shintaro Yamaoka, Hiromasa Miura
¹⁾ *Spine Center, Ehime University Hospital, Tohon-city, Ehime 791-0295, Japan*
²⁾ *Department of Bone and Joint Surgery, Ehime University School of Medicine, Tohon-city, Ehime 791-0295, Japan*

- **QF19** POSTERIOR CERVICAL PEDICLE SCREW VERSUS 360° STABILIZATION OF THE SUBAXIAL CERVICAL SPINE IN A MULTILEVEL VERTEBRAL BODY FAILURE MODEL. AN IN VITRO BIOMECHANICAL STUDY
John Duff, Lukas Bobinski, Mir Mir Hussain, Noelle Klocke, Soumya Yandamouri, Brandon Bucklen, Marc Levivier, Roy Daniel
Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland; Globus Medical Inc., Audubon PA, USA

- **QF20** EFFECT OF SAGITTAL ALIGNMENT ON THE CERVICAL SPINE NEUROFORAMINAL SPACE. CT BASED BIOMECHANICAL CADAVERIC STUDY
Zachary Smith, Saeed Khayazadeh, Robert Havey, Muturi Muriuki, Leonard Voronov, Avinash Patwardhan
Northwestern University, Chicago, Illinois, USA; Loyola University Chicago, Illinois, USA; Edward Hines Jr. VA Hospital

- **QF21** C2 DOME DECOMPRESSION METHODS FOR OSSIFICATION OF THE POSTERIOR LONGITUDINAL LIGAMENT OF CERVICAL SPINE
Futoshi Suetsuna, Takahisa Kaneko
Hachinohe Municipal Hospital

- **QF22** FACTORS ASSOCIATED WITH PERSISTING SPINAL CORD COMPRESSION AFTER REDUCTION OF CERVICAL DISLOCATION
Takeshi Maeda, Eiji Mori, Itaru Yague, Osamu Kawano, Tsuneaki Takao, Hiroaki Sakai, Keiichiro Shiba
Spinal Injuries Center

- **QF23** POSTERIOR DECOMPRESSION AND FUSION FOR CERVICAL OPLL PREVENT VOLUME INCREASE OF OSSIFIED LESION
Tomohiro Izumi, Keiichi Katsumi, Akiyoshi Yamazaki, Toru Hirano, Yu Sato, Ryuta Fujikawa, Tatsuki Mizouchi
Niigata central hospital

- **QF24** INCIDENCE OF NEUROLOGICAL COMPLICATIONS FOLLOWING SURGICAL MANAGEMENT OF CERVICAL MYELOPATHY
Subir Jhaveri, Avani Jhaveri
Division of Spine Surgery, Dr.Jhaveri's Spine Hospital

- **QF25** FUNCTIONAL OUTCOMES IN PATIENTS OPERATED FOR CERVICAL SPONDYLOTIC MYELOPATHY (CSM)
Subir Jhaveri, Avani Jhaveri, Samir Patel
Dr. Jhaveri's Spine Hospital
- **QF26** SUBAXIAL SUBLUXATION FOLLOWING ATLANTO-AXIAL ARTHRODESIS IN PATIENTS WITH RHEUMATOID ARTHRITIS: AN ANALYSIS OF ANNUAL RADIOGRAPHS OBTAINED FOR FIVE YEARS AFTER SURGERY
Haku Iizuka, Yoichi Iizuka, Tokue Mieda, Kenji Takagishi
Department of Orthopaedic Surgery, Gunma University Graduate School of Medicine
- **QF27** TOTAL DISC REPLACEMENT VERSUS ACDF: RESULTS FROM A TWO-LEVEL PROSPECTIVE, RANDOMIZED, CLINICAL TRIAL WITH 48 MONTHS FOLLOW-UP
Jean-Paul STEIB, Reginald DAVIS
¹) CHU Strasbourg, Strasbourg, France; ²) GBMC Healthcare Greater Baltimore Neurosurgical Associates, Baltimore, MD USA
- **QF28** TWO-LEVEL HYBRID SURGICAL RECONSTRUCTION OF THE CERVICAL SPINE: A KINEMATIC STUDY IN WHOLE CADAVERS
Baoge Liu, Zheng Zeng, Tom VanHoof, JeanPierre Kalala, Zhenyu Liu, Bingxuan Wu
Department of Orthopaedic surgery, Beijing Tian Tan Hospital, Capital Medical University; Department of Anatomy, Ghent University, Ghent, Belgium; Department of Neurosurgery, Ghent, University Hospital, Belgium
- **QF29** MID-TERM RESULTS OF TOTAL DISC REPLACEMENT IN THE CERVICAL SPINE: A PROSPECTIVE CLINICAL AND X-RAY INVESTIGATION WITH AT LEAST 5 YEAR FOLLOW-UP
Franziska C. Heider, Bernhard Zillner, Andreas Korge, Christoph J. Siepe, Michael H. Mayer, Christoph Mehren
Schön Clinic Munich Harlaching, Germany
- **QF30** ARTIFICIAL DISC REPLACEMENT COMBINED WITH FUSION VERSUS TWO-LEVEL FUSION IN CERVICAL TWO-LEVEL DISC DISEASE WITH 5 YEARS FOLLOW-UP
Gyu Yeul Ji, Chang Hyun Oh, Dong Ah Shin, Do Heum Yoon, Keung Nyun Kim, Hyun Cheol Shin
Department of Neurosurgery, Guro Teun Teun Hospital, Seoul, South Korea; Department of Neurosurgery, Spine and Spinal Cord Research Institute, Yonsei University College of Medicine, Seoul, South Korea

14:00

- **Thoraco-Lumbar Spine, non-degenerative**
Room Rhône 1, Level Rhône/Pasteur
Chairs: Helton Defino, Ribeirão Preto, Brasil, Aron Lazary, Budapest, Hungary

- **QF31** V-Y VERTEBRAL BODY OSTEOTOMY FOR THE TREATMENT OF FIXED FLEXION DEFORMITY OF THE SPINE
Hossein Mehdian, Georgios Arealis, Sherief Elsayed, Oliver Stokes, Nasir Quraishi
Centre for Spinal Studies and Surgery, Queens Medical Centre, Nottingham
- **QF32** HIGH DOSE OF TRANEXAMIC ACID REDUCES INTRAOPERATIVE BLOOD LOSS IN PATIENTS UNDERGOING POSTERIOR VERTEBRAL COLUMN RESECTION- A CLINICAL COMPARATIVE STUDY OF 89 CONSECUTIVE PATIENTS
Tao Li, Jingming Xie, Ying Zhang, Yingsong Wang, Leijie Chen, Zhou Liu, Zhiyue Shi, Zhi Zhao, Ni Bi
Department of Orthopedics, The 2nd Affiliated Hospital of Kunming Medical University, Yunnan Province, P.R.CHINA

- **QF33** PROGRESSION OF OSSIFICATION OF THE POSTERIOR LONGITUDINAL LIGAMENT OF THE THORACIC SPINE FOLLOWING POSTERIOR DECOMPRESSION AND STABILIZATION
Shurei Sugita, Hirotaka Chikuda, Katsushi Takeshita, Sakae Tanaka
The University of Tokyo

- **QF34** C1-C2 STABILIZATION USING HARMS TECHNIQUE: INDICATIONS, TECHNIQUE, COMPLICATIONS AND OUTCOMES IN A PROSPECTIVE 38-CASE SERIES
Cédric BARREY, Pierre BOURDILLON, Gilles PERRIN
Department of spine surgery, Hospices Civils de Lyon, University Claude Bernard Lyon1, France

- **QF35** REVIEW OF MANAGEMENT OF ISOLATED C2 FRACTURES IN WEST MIDLANDS. AN 11 YEAR RETROSPECTIVE STUDY
Rosamond Tansey, Theofano Tikka, Sarin Kuruvath
Department of Neurosurgery, Birmingham, United Kingdom

- **QF36** POOR PROGNOSTIC FACTORS IN DISTRACTIVE-EXTENSION INJURY OF THE SUBAXIAL SPINE
Donghoon Ham, Kyungjin Song, Chanill Park, Kwangbok Lee
Department of Orthopedic Surgery, School of Medicine, Research Institute of Clinical Medicine, Chonbuk National University Hospital, Jeonju, Korea

- **QF37** EFFECT OF VERTEBROPLASTY WITH BONE FILLER DEVICE AND COMPARISON WITH BALLOON KYPHOPLASTY
Dong-Hoon Yang, Young Sun Chung, Ki-Hong Cho
KOFIH (Korea Foundation of International Healthcare): Department of Neurosurgery, Ajou University Hospital, Ajou University; Department of Neurosurgery, Konkuk University Chungju Hospital, Konkuk University

- **QF38** KUMAFIX FIXATION FOR THORACOLUMBAR BURST FRACTURES: A PROSPECTIVE STUDY ON SELECTIVE CONSECUTIVE PATIENTS
Dingjun Hao, Baorong He, Liang Yan
Spine Surgery, Xi'an, China

- **QF39** OPTIMIZING HEMODYNAMIC PARAMETERS AFTER ACUTE SPINAL CORD INJURY
Sean Christie, Ayoub Dakson, David Brandman, Ginette Thibault-Halman
Dalhousie University

- **QF40** CURRENT SURGICAL PRACTICE FOR TRAUMATIC SPINAL CORD INJURY IN CENTRAL CORD SYNDROME PATIENTS IN CANADA.
Jerome Paquet, Brian Drew, Michael Fehlings, Henry Ahn, Najmedden Attabib, Christopher Bailey, Sean Christie, Neil Duggal, Joel Finkelstein, Daryl Fourney
Rick Hansen Institute, Health Canada

- **QF41** EVALUATION OF SCORING SYSTEMS AND PROGNOSTIC FACTORS IN PATIENTS WITH SPINAL METASTASES FROM NASOPHARYNGEAL CARCINOMA
Naresh Kumar, Jonathan Tan, Aye Sandar Zaw, Khin Lay Wai
National University Health System

- **QF42** PROGNOSTIC SIGNIFICANCE OF T GENE SNP S2305089 IN INDIVIDUALS WITH SPINAL COLUMN CHORDOMA
Peter Pal Varga, Charles G. Fisher, Laurence D. Rhines, Stefano Boriani, Áron Lazary, Wei-Lien Wang, Nicole Germscheid, Stephen Yip, Chetan Bettgowda
National Center for Spinal Disorders

- **QF43** PRIMARY OSTEOSARCOMAS OF THE SPINE: A MULTICENTER REVIEW OF 57 SURGICAL CASES
Michelle J. Clarke, Peter Pal Varga, Laurence D. Rhines, Charles G. Fisher, Dean Chou, Nasir A. Quraishi, Michael G. Fehlings, Ziya L. Gokaslan, Stefano Boriani
National Center for Spinal Disorders and Buda Health Center
- **QF44** A MULTICENTRE RETROSPECTIVE COHORT STUDY OF SPINAL OSTEOID OSTEOMAS: SURGICAL TREATMENT AND LOCAL RECURRENCE RESULTS
Nasir A. Quraishi, Stefano Boriani, Peter Pal Varga, Alessandro Luzzati, Ziya L. Gokaslan, Michael G. Fehlings, Charles G. Fisher, Laurence D. Rhines, Jeremy J. Reynolds, Richard Williams
Nottingham University Hospital NHS Trust; Centre for Spinal Studies & Surgery; Queen's Medical Centre campus
- **QF45** ANEURYSMAL BONE CYSTS OF THE SPINE: TREATMENT OPTIONS AND CONSIDERATIONS
Stefano Boriani, Sheng-fu Larry Lo, Varun Puvanesarajah, Dean Chou, Charles G. Fisher, Laurence D. Rhines, Richard Williams, Peter Pal Varga, Zsolt Szövérfi, Chetan Bettegowda
National Center for Spinal Disorders

14:00

- **Thoraco-Lumbar Spine, degenerative**
Room Auditorium Pasteur, Level Rhône/Pasteur
Chairs: Stavros Stavridis, Thessaloniki, Greece; JeanPaul Steib, Strasbourg, France

- **QF46** LONG-TERM RESULTS OF TOTAL LUMBAR DISC REPLACEMENT: A PROSPECTIVE ANALYSIS OF 201 PATIENTS WITH 10 YEAR FOLLOW-UP
Christoph Siepe, Karsten Wiechert, Franziska Heider, Christoph Mehren, Andreas Korge, Michael Mayer
Schön Clinic Munich Harlaching; Spine Center; Academic Teaching Hospital of the Paracelsus Private Medical University (PMU), Salzburg, Austria
- **QF47** RESISTIVE STRAIGHT LEG RAISE TEST, RESISTIVE FORWARD BEND TEST AND HEEL COMPRESSION TEST. NOVEL TECHNIQUES IN IDENTIFYING SECONDARY GAIN MOTIVES IN LOW BACK PAIN CASES
Naresh Kumar
National University Health System
- **QF48** PROSPECTIVE CLINICAL AND RADIOLOGICAL INVESTIGATION OF FUSION AT THE LUMBOSACRAL JUNCTION WITH AN ANTERIOR STAND-ALONE DEVICE
Christoph Siepe, Katrin Stosch-Wiechert, Franziska Heider, Phat Amnajtrakul, Alexander Krenauer, Ulrike Szeimies, Axel Stäbler, Michael Mayer
Schön Clinic Munich Harlaching; Spine Center; Academic Teaching Hospital of the Paracelsus Private Medical University (PMU), Salzburg, Austria
- **QF49** LUMBOPELVIC BALANCE IN SPONDYLOLYSIS PARS REPAIR
Augusto covaro, Anna Ey, Inma Vilalta, Melisa Stitzman, Iago Garreta, Norberto Ventura
Hospital Sant Joan de Deu

- **QF50** INFLUENCE OF HETEROTOPIC BONE FORMATION IN CLINICAL AND RADIOLOGICAL OUTCOMES AFTER 7 YEARS FOLLOW-UP OF A BALL AND SOCKED METAL ON METAL LATERAL LUMBAR TOTAL DISC REPLACEMENT DEVICE
Luiz Pimenta, Leonardo Oliveira, Rodrigo Amaral, Thabata Bueno, Etevaldo Coutinho, Luis Marchi
Instituto de Patologia da Coluna, São Paulo, Brazil

- **QF51** POSTEROLATERAL INSTRUMENTED FUSION (PLF) WITH OR WITHOUT TRANSFORAMINAL LUMBAR INTERBODY FUSION (TLIF) FOR THE TREATMENT OF ISTHMIC SPONDYLOLISTHESIS: A RANDOMIZED CLINICAL TRIAL WITH 2-YEARS FOLLOW-UP
Mohammadreza etemadifar, mehran feizi masouleh
St. zahra hospital

- **QF52** DIAGNOSIS OF INTERMITTENT NEUROGENIC CLAUDICATION AND PREDICTING CLINICAL OUTCOME PREOPERATIVE USING MR IMAGING STUDIES.
Wouter Moojen, Catharina Schenck, Geert Lycklema a Nijeholt, Wilco Jacobs, Bas van der Kallen, Mark Arts, Wilco Peul, Carmen Vleggeert-Lankamp
Leiden University Medical Center, The Netherlands

- **QF53** DISABLED ACTIVITIES AFTER CORRECTIVE SURGERY FOR ADULT SPINAL DEFORMITY
Daisuke Togawa, Tomohiko Hasegawa, Yu Yamato, Sho Kobayashi, Tatsuya Yasuda, Hideyuki Arima, Yukihiro Matsuyama
Department of Orthopaedic Surgery, Hamamatsu University School of Medicine, Shizuoka, JAPAN

- **QF54** TOEI 2012 STUDY: SAGITTAL SPINAL ALIGNMENT VERSUS OSWESTRY DISABILITY INDEX IN HIGH AGE VOLUNTEERS
Daisuke Togawa, Tatsuya Yasuda, Yu Yamato, Yu Watanabe, Koichiro Ide, Tomohiro Yamada, Sho Kobayashi, Hideyuki Arima, Tomohiko Hasegawa, Yukihiro Matsuyama
Department of Orthopaedic Surgery, Hamamatsu University School of Medicine, Shizuoka, JAPAN.

- **QF55** TOPICAL, INTRA-WOUND VANCOMYCIN POWDER DECREASES THE RISK OF SURGICAL SITE INFECTIONS IN COMPLEX ADULT DEFORMITY RECONSTRUCTION: A COST-BENEFIT ANALYSIS.
Halil Gokhan Demirkiran, Alexander Theolegis, Murat Pekmezci, Christopher Ames, Vedat Deviren
Department of Orthopaedic Surgery, University of California – San Francisco (UCSF); Department of Neurologic Surgery, UCSF

- **QF56** RECOVERY OF SEVERE MOTOR DEFICIT SECONDARY TO HERNIATED LUMBAR DISC PROLAPSE: IS SURGICAL INTERVENTION IMPORTANT? A SYSTEMATIC REVIEW
Venkatesh Balaji, Kuen Foo Chin, Stewart Tucker, Lester Wilson, Adrian Casey
Spinal Surgery, London, United Kingdom

- **QF57** RESULTS FROM LUMBAR FUSION USING TLIF WITH DIFFERENT BONE GRAFTING MATERIALS: A PROSPECTIVE RANDOMIZED STUDY
Nicolas H vonderHoeh, Anna Voelker, Jens Gulow, Christoph-E. Heyde
University Hospital Leipzig

- **QF58** HIGH GRADE SPONDYLOLISTHESIS SURGICAL MANAGEMENT: REDUCTION OR ARTHRODESIS IN SITU. A MULTICENTER REVIEW OF 207 CASES
Féthi Laouissat, Clément Silvestre, Gérard Bollini, Daniel Chopin, Thierry Odent, Jean-paul Steib, Jérôme Sales-de-Gauzy, Pierre Guigui, Keyvan Mazda, Pierre Roussouly
CMCR Massues - Croix Rouge Française
- **QF59** A STUDY OF THE EVOLUTIONARY CHANGES IN SPINAL CANAL DIMENSIONS
Constantin Schizas, Schmit Aline, Alexis Schizas, Fabio Becce, Gerit Kulik, Katarzyna Pierzcha
Clinic Cecil/ CHUV
- **QF60** THE RELATIONSHIP OF GLOBAL SAGITTAL IMBALANCE AND PELVIC INCIDENCE LUMBAR LORDOSIS MISMATCH IN DEGENERATIVE SCOLIOSIS
Dominique A. Rothenfluh, Louis Boissiere, Ibrahim Obeid
Nuffield Orthopaedic Centre, Oxford University Hospitals NHS Trust

14:00

- **Basic Science / Others**
Room Bellecour 1, Level 1
Chairs: Werner Schmoelz, Innsbruck, Austria; Dominique Rothenfluh, Oxford, UK

- **QF61** RISK FACTORS FOR POSTOPERATIVE SPINAL EPIDURAL HEMATOMA
Kentaro Yamada, Yuichiro Abe, Yasushi Yanagibashi, Takahiko Hyakumachi, Shigenobu Sato
Wajokai Eniwa Hospital
- **QF62** SURGICAL SITE INFECTION IN SPINAL OPERATIONS. A TERTIARY CENTRE REVIEW OF 4557 CONSECUTIVE PROCEDURES OVER 5 YEARS
Hassan Fawi, Mohamed Ahmet, Jose Magol, Megan Lewis, Sashin Ahuja
Welsh Centre for Spinal Surgery & Trauma, University Hospital of Wales, Cardiff, UK
- **QF63** CAN NSAID(DICLOFENAC SODIUM) REDUCE A BMP-INDUCED INFLAMMATION IN A RODENT MODEL?
Yong-Jin Kim, Joo-Rang Lee, Ki-Tae Park, Kyung-Jin Song, Kwang-Bok Lee, In-Sung Huh, Seung-Min Choi
Chonbuk National University Medical School, Chonbuk National University Hospital
- **QF64** THE EFFICACY OF THE 70% CRITERION IN INTRAOPERATIVE NEUROPHYSIOLOGICAL MONITORING USING MUSCLE EVOKED POTENTIALS FOR THE RESECTION OF INTRAMEDULLARY SPINAL CORD TUMORS: THE JSSR PROSPECTIVE MULTI-CENTER STUDY
Yasushi Fujiwara, Yukihiro Matsuyama, Sho Kobayashi, Zenya Ito, Shigenori kawabata, Tsukasa Kanchiku, Kanichiro Wada, Kei Yamada, Takanori Saito, Toshikazu Tani
Department of Orthopedic Surgery, Hiroshima City Asa Hospital, Hiroshima
- **QF65** MEASURE YOUR OWN MEDICAL OUTCOME PROFILE (MYMOP) - VALIDATION OF A PATIENT GENERATED OUTCOME QUESTIONNAIRE BY COMPARISON TO THE ROLAND MORRIS DISABILITY QUESTIONNAIRE (RMDQ).
Patrick Hourigan, Andrew Clarke, Sarah Whitehouse, Helen Challinor
Department of Spinal Surgery; Peninsula Spinal Unit; Royal Devon and Exeter Hospital
- **QF66** RADIOLOGICAL EVALUATION AFTER POSTERIOR INSTRUMENTED SURGERY FOR THORACIC OSSIFICATION OF POSTERIOR LONGITUDINAL LIGAMENT - UNION BETWEEN ROSTRAL AND CAUDAL OSSIFICATIONS
Kei Ando, Shiro Imagama, Zenya Ito
Department of Orthopaedic Surgery, Nagoya University Graduate School of Medicine

- **QF67** INCREASED FACET FLUID PREDICTS DYNAMIC CHANGE IN THE DURAL SAC SIZE ON AXIAL LOADED MRI IN PATIENTS WITH LUMBAR SPINAL CANAL STENOSIS
Haruo Kanno, Hiroshi Ozawa, Toshimi Aizawa, Eiji Itoi
Department of Orthopaedic Surgery; Tohoku University School of Medicine

- **QF68** DOES A FACET JOINT COMPRESSION WITH POSTERIOR INSTRUMENTATION IMPROVE THE PRIMARY STABILITY OF A TYPE A FRACTURE?
Hans-Joachim Wilke¹, Ivo Nennstiel², Michael Ruf³, David Volkheimer¹
¹)Institute of Orthopaedic Research and Biomechanics, Center of Musculoskeletal Research (zmfu), University Hospital Ulm, Germany ²)SRH Zentralklinikum Suhl GmbH, Suhl, Germany; ³)SRH Klinikum Karlsbad-Langensteinbach GmbH, Karlsbad-Langensteinbach, Germany

- **QF69** ANATOMICAL ANALYSIS FOR TRANSFORAMINAL APPROACH OF PERCUTANEOUS ENDOSCOPIC LUMBAR DISCECTOMY
Fumitake Tezuka, Toshinori Sakai, Yuichiro Goda, Yoichiro Takata, Kosaku Higashino, Koichi Sairyo
Department of Orthopedics, The University of Tokushima Graduate School

- **QF70** CERVICAL SPINE KINEMATIC DURING UNCONSTRAINED DAILY ACTIVITIES AFTER CERVICAL ARTHROPLASTY OR FUSION
Alphonse Lubansu, Cyntia Duc, Kamiar aminian, Veronique Feipel, Olivier De Witte, Marcel Rooze, Patrick Salvia
¹)Department of Neurosurgery, Hôpital Erasme, Université Libre de Bruxelles (ULB), Brussels, Belgium; ²)Laboratory of Anatomy, Biomechanics and organogenesis (LABO), Université Libre de Bruxelles (ULB), Belgium

- **QF71** LONG-TERM ADMINISTRATION OF INTERMITTENT TERIPARATIDE (PTH1-34) ACCELERATES REMODELING OF BMP-INDUCED NEW BONE IN A RAT SPINAL FUSION MODEL.
Tokimitsu Morimoto, Takahi Kaito, Masafumi Kashii, Yohei Matsuo, Tsuyoshi Sugiura, Takahiro Makino, Motoki Iwasaki, Hideki Yoshikawa
Department of Orthopaedic Surgery, Osaka University Graduate School of Medicine

- **QF72** RECONSTRUCTION WITH EXPANDABLE CAGES AFTER SINGLE AND MULTILEVEL CORPECTOMIES FOR SPINAL METASTASES: A PROSPECTIVE CASE SERIES OF 60 PATIENTS
Daniel Lobatto, Godard de Ruiter, Jasper Wolfs, Wilco Peul, Mark Arts
¹)Department of Neurosurgery, Medical Center Haaglanden, The Hague, The Netherlands;
²)Department of Neurosurgery, Leiden University Medical Center, Leiden, NL

- **QF73** CHANGE IN ADC AND FA VALUES OF THE NORMAL LUMBAR SPINAL ROOT AS A FUNCTION OF DISTANCE FROM THE JUNCTION OF THE DURA MATER
Ryo Miyagi, Toshinori Sakai, Eiko Yamabe, Hiroshi Yoshioka
Department of Orthopedics, The University of Tokushima Graduate School;
Department of the Radiological Sciences, University of California Irvine

- **QF74** ACCURACY OF INTRAOPERATIVE FROZEN SECTION DIAGNOSIS IN SPINAL CORD LESIONS
Toru Hirano, Kei Watanabe, Keiichi Katsumi, Masayuki Ohashi, Naoto Endo
Niigata University Medical and Dental Hospital

- **QF75**
P38 MITOGEN ACTIVATED PROTEIN KINASE INHIBITOR AMELIORATES MOTOR FUNCTION BY INHIBITION OF CHONDROITIN SULFATE PROTEOGLYCANS AFTER SPINAL CORD INJURY IN RAT
Tadao Morino, Tadanori Ogata, Hideki Horiuchi, Shintaro Yamaoka, Hiromasa Miura
¹)Spine Center, Ehime University Hospital, Tohon-city, Ehime 791-0295, Japan;
²) Department of Bone and Joint Surgery, Ehime University School of Medicine, Tohon-city, Ehime 791-0295, Japan

15:30

ADJOURN – END



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Scientific Programme

E-Posters



E-Posters

Adult Thoracolumbar Spine, degenerative, deformity

- P1** CORTICAL BONE TRAJECTORY AT L5 LUMBAR LEVEL HAD POTENTIAL RISK FOR L4/5 FACET JOINT VIOLATION IN ELDERLY PATIENTS: A SIMULATED MORPHOMETRIC ANALYSIS USING 3D-CT.
Yuichiro Abe, Shigenobu Sato, Kentaro Yamada
Orthopedic surgery, Eniwa, Japan
- P2** RADIOLOGICAL OUTCOMES AND COMPLICATIONS OF S2 ALAR-ILIAC FIXATION IN ADULT PATIENTS WITH OSTEOPOROTIC SPINE
Meric Enercan, Sinan Kahraman, Bahadir Gokcen, Ayhan Mutlu, Tunay Sanli, Erden Erturer, Cagatay Ozturk, Azmi Hamzaoglu
Orthopedics and Traumatology, Istanbul, Turkey
- P3** IMPROVEMENT OF ACCURACY OF PEDICLE SCREW PLACEMENT INTO THORACOLUMBAR SPINE BY THE C-ARM ROTATION TECHNIQUE: IMPORTANCE OF SCREW ENTRY POINTS TO PREVENT MISPLACEMENT.
Hideki Horiuchi, Tadanori Ogata, Morino Tadao, Shintaro Yamaoka, Hiromasa Miura
1) Spine Center, Ehime University Hospital, Tohon-city, Ehime 791-0295, Japan
2) Department of Bone and Joint Surgery, Ehime University School of Medicine, Tohon-city, Ehime, Japan
- P4** KEY SPINO-PELVIC PARAMETERS AFFECTING TO SAGITTAL BALANCE IN POSTOPERATIVE ADULT SPINAL DEFORMITY PATIENTS WITH MINIMUM TWO-YEARS FOLLOW-UP
Satoshi Inami, Hiroshi Taneichi, Hiroshi Moridaira, Daisaku Takeuchi, Yo Shiba
Department of Orthopedic Surgery Dokkyo Medical University, Tochigi, Japan
- P5** REOPERATION AND REVISION RATES FOLLOWING INSTRUMENTED LUMBAR SPINE FUSION: MINIMUM OF TWO YEARS FOLLOW-UP
Tero Irmola, Arja Häkkinen, Ilkka Marttinen, Marko Wahlman, Kimmo Vihtonen, Tuukka Porkka, Seija Rautiainen, Marko Neva
Department of Orthopaedics and Traumatology, Tampere University Hospital, Tampere, Finland
- P6** THORACIC OR LUMBAR SPINAL SURGERY IN PATIENTS WITH PARKINSON'S DISEASE A TWO-CENTER EXPERIENCE OF 32 CASES
Hiroaki Kimura, Shunsuke Fujibayashi, Bungo Otsuki, Mitsuru Takemoto, Jitsuhiko Shikata, Seiichi Odate, Shuichi Matsuda
Department of Orthopedic Surgery, Graduate School of Medicine, Kyoto University, Department of Orthopedic Surgery, Gakkentoshi Hospita, Kyoto, Japan
- P7** SAGITTAL DECOMPENSATION FOLLOWING LONG FUSION TO SACRUM IN ADULT SPINAL DEFORMITY: CAN PREVENT SAGITTAL DECOMPENSATION BY OVERCORRECTION?
Jung-Hee Lee, Jin-Soo Kim, Il-Heon Choi, Hyun-Seok Oh, Chul-Hee Lee, Wook-Jae Song
Orthopaedic Surgery, Seoul, South Korea
- P8** COULD LESS BE MORE IN THE ASSESSMENT OF PATIENT-RATED OUTCOME IN ADULT SPINAL DEFORMITY?
Anne F Mannion, Alba Vila-Casademunt, Montserrat Domingo-Sàbat, Sarah Wunderlin, Emre Acaroglu, Ahmet Alanay, Francisco J Sánchez Pérez-Grueso, Ferran Pellisé, Frank Kleinstück, ESSG European Spine Study Group
Schulthess Klinik, Hospital Universitari Vall Hebron, Hospital Universitario La Paz, Ankara Spine Center, Acibadem Maslak Hospital

P9 CAUDA EQUINA SYNDROME - A CLINICAL DILEMMA

Navraj S Nagra, Ravi Badge, John Stephenson, Hiren Divecha, Irfan Siddique, Saeed Mohammed, Rajat Verma

Salford Royal NHS Foundation Trust, Stott Lane, Salford, M6 8HD, UK, University of Manchester, Oxford Road, Manchester, M13 9PL, UK

P10 ALLOGRAFT ALONE VERSUS ALLOGRAFT WITH BONE MARROW CONCENTRATE FOR THE HEALING OF THE INSTRUMENTED POSTEROLATERAL LUMBAR FUSION

David Náhlik, Radek Hart, Martin Komzák, Milo Puskeiler, Pavel Jajtner

Department of Orthopaedics and Traumatology, Znojmo, Czech Republic

P11 CLINICAL CORRELATION OF SRS-SCHWAB CLASSIFICATION WITH HRQOL MEASURES IN A PROSPECTIVE NON-US COHORT OF ASD PATIENTS

Dennis Hallager Nielsen, Lars V. Hansen, Casper R. Dragsted, Martin Gehrchen, Benny Dahl

Department of Orthopaedic Surgery, Spine Section, Rigshospitalet, Copenhagen, Denmark

P12 ANALYSIS OF COMPLICATIONS IN THE SURGICAL TREATMENT OF SPONDYLOLISTHESIS.

Tomasz Potaczek, Andrzej Smetkowski, Maciej Tesiorowski, Pawel Radlo, Barbara Jasiewicz

Department of Orthopedic Surgery and Rehabilitation, Zakopane, Poland

P13 LIFESTYLE-RELATED DISEASES AFFECT SURGICAL OUTCOMES AFTER POSTERIOR LUMBAR INTER BODY FUSION

Hironobu Sakaura, Toshitada Miwa, Yusuke Kuroda, Tetsuo Ohwada

Kansai Rosai Hospital, Orthopaedic Surgery, Amagasaki, Japan

P14 A COMPARATIVE STUDY TO ASSESS FUSION RATE DIFFERENCES BETWEEN TITANIUM AND POLYETHERETHERKETONE(PEEK) CAGES IN LUMBAR TLIF PROCEDURE

Gemma Vilà Canet, Anna Isart Torruella, Augusto Covaro, Ana Garcia de Frutos, M.Teresa Ubierna Garcés, Enric Cáceres Palou

ICATME, Hospital Universitari Quiron-Dexeus, Barcelona, Spain

P15 MID- AND LONG-TERM CLINICAL OUTCOMES OF CORRECTIVE FUSION SURGERY WHICH DID NOT ACQUIRED SUFFICIENT PI-LL VALUE FOR ADULT SPINAL DEFORMITY

Kentaro Yamada, Yuichiro Abe, Yasushi Yanagibashi, Takahiko Hyakumachi, Shigenobu Sato

Wajokai Eniwa Hospital. Department of orthopaedic surgery, Eniwa city, Hokkaido, Japan

Adult Thoracolumbar Spine, non-degenerative**P16 POST-TRAUMATIC SPONDYLODISCITIS. SERIES OF 12 PATIENTS AND REVIEW OF THE LITERATURE**

Hamdan Abdelrahman, Mootaz Shousha, Heinrich Böhm

Department of Spine Surgery, Bad Berka, Germany - Assiut University Hospitals, Egypt

P17 TREATMENT FOR ACUTE OR SUBACUTE OSTEOPOROSIS VERTEBRAL COMPRESSION FRACTURES: PERCUTANEOUS VERTEBROPLASTY VERSUS FACETS BLOCKING (A CLINICAL RANDOMIZED STUDY)

Dingjun Hao, Biao Wang, Hua Guo, Xiaodong Wang

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

P18 TRAUMATIC CAUDA EQUINA HERNIATION OCCURRING WITH LUMBAR BURST FRACTURES IN FORTY-NINE PATIENTS

Dingjun Hao, Baorong He, Liang Yan

Spine Surgery, Xi'an, China

P19 DENOSUMAB AS AN ALTERNATIVE TREATMENT FOR HARDLY RESECTABLE GIANT CELL TUMORS (GCT) OF THE SPINE

Diego Valverde Belda, Antonio MARTIN BENLLOCH, Ana MORALES CODINA, Sonia MUÑOZ DONAT, Rafael AGUIRRE GARCIA, Jose Manuel VENTURA CERDA, Ana Cristina CERCOS LLETI

H.U. Dr. Peset de Valencia, Valencia, Spain

- P20** LONG POSTERIOR FIXATION WITH SHORT FUSION FOR THE TREATMENT OF TB SPONDYLITIS OF THE THORACIC AND LUMBAR SPINE WITH OR WITHOUT NEUROLOGIC DEFICIT
Shih-Tien Wang, Chien-Lin Liu
School of Medicine, National Yang Ming University and Department of Orthopedics and Traumatology, Taipei Veterans General Hospital, Taipei, Taiwan
- P21** THE POSTERIOR SURGICAL TREATMENT FOR FOCAL KYPHOSIS IN UPPER-MIDDLE THORACIC SPINE
Yan Zeng, Zhongqiang Chen, Zhaoqing Guo, Qiang Qi, Weishi Li, Chuiguo Sun
Orthopedics, Peking University Third Hospital, Beijing, China

Basic Science - Biology

- P22** CYTOKINE PROFILE IN HERNIATED LUMBAR DISC CHANGES WITH TIME OF SCIATICA
Arpad Bozsodi, Aron Lazary, Peter Paul Varga
National Center for Spinal Disorders, Budapest, Hungary
- P23** CHRONIC PROGRESSIVE COMPRESSION INDUCES THE PHENOTYPE CHANGES OF THE ACTIVATED MICROGLIA/MACROPHAGES IN THE SPINAL CORD OF SPINAL HYPEROSTOTIC TWY/TWY MOUSE: IMPLICATIONS IN HUMAN CERVICAL COMPRESSIVE MYELOPATHY.
Takayuki Hirai, Kenzo Uchida, Hideaki Nakajima, Tomoo Inukai, Naoto Takeura, Shuji Watanabe, Hisatoshi Baba
Orthopaedics and Rehabilitation Medicine, Faculty of Medical Science, Fukui, Japan
- P24** SPONTANEOUS REGRESSION MECHANISMS OF LUMBAR DISC HERNIATION: ROLE OF APOPTOSIS AND MACROPHAGES DURING DISC TISSUE RESORPTION
Shigeru Kobayashi, Riya Kosaka, Adam Meir
1. Dept of Orthopaedics and rehabilitation, Faculty of Medical Sciences, The University of Fukui, Fukui, Japan; 2. Dept of Orthopaedic Surgery, Hirakata City Hospital, Osaka, Japan; 3. Spine Unit, National Hospital for Neurology and Neurosurgery, London, UK,
- P25** PHYSICAL LIMITATIONS TO TISSUE ENGINEERING OF INTERVERTEBRAL DISC: LIMITED EFFECT OF TRANSFORMING GROWTH FACTOR (TGF, FIBROBLAST GROWTH FACTOR (FGF)-2 AND OSTEOGENIC PROTEIN (OP)-1
Shigeru Kobayashi, Kenichi Takeno, Tsuyoshi Miyazaki, Riya Kosaka, Adam Meir
1. Department of Orthopaedics and Rehabilitation Medicine, Faculty of Medical Sciences, The University of Fukui, Fukui, Japan; 2. Department of Orthopaedic Surgery, Hirakata City Hospital, Osaka, Japan; 3. National Hospital for Neurology and Neurosurgery, Spine Unit, Queen Square, London, UK
- P26** ALENDRONATE STIMULATES GLYCOSAMINOGLYCAN PRODUCTION IN DISC CELLS
Shigeru Kobayashi, Tsuyoshi Miyazaki, Adam Meir, Riya Kosaka
1. Department of Orthopaedics and Rehabilitation Medicine, Faculty of Medical Sciences, The University of Fukui, Fukui, Japan; 2. National Hospital for Neurology and Neurosurgery, Spine Unit, Queen Square, London, UK; 3. Department of Orthopaedic Surgery, Hirakata City Hospital, Osaka, Japan
- P27** INTRATHECAL INJECTION OF AUTOLOGOUS MACROPHAGES GENETICALLY MODIFIED TO SECRETE BDNF BY EX VIVO ELECTROPORATION IMPROVES HIND LIMB MOTOR FUNCTION AFTER THORACIC SPINAL CORD INJURY IN RATS.
Tadanori Ogata, Tadao Morino, Hideki Horiuchi, Shintaro Yamaoka, Hiromasa Miura
1) Spine Center, Ehime University Hospital, Tohon-city, Ehime 791-0295, Japan; 2) Department of Bone and Joint Surgery, Ehime University School of Medicine, Tohon-city, Ehime 791-0295, Japan
- P28** PATHOGENESIS OF CERVICAL MYELOPATHY IN CHRONIC CERVICAL CORD COMPRESSION MODEL OF RAT
Shigeru Kobayashi, Masafumi Kubota, Hisao Iwamoto, Riya Kosaka, Katsuhiko Hayakawa
1Department of Orthopaedic and Rehabilitation Medicine, University of Fukui, Fukui, Japan; 2 Department of Orthopaedic Surgery, Iwamoto Orthopaedic Clinic, Osaka, Japan; 3Department of Orthopaedic Surgery, Hirakata City Hospital, Osaka, Japan; 4 Department of Orthopaedic Surgery, Aiko Orthopaedic Clinic, Osaka, Japan

P29 INDIANHEDGEHOG SIGNALING INDUCES HYPERTROPHY AND DIFFERENTIATION OF CHONDROCYTES IN THE OSSIFICATION FRONT OF HUMAN CERVICAL OPLL.

Kenzo Uchida, Hideaki Nakajima, Shuji Watanabe, Ai Yoshida, Hisatoshi Baba
Orthopaedics and rehabilitation medicine, faculty of medical sciences, university of Fukui, Dept.
Orthopedics and Rehabilitation Medicine, Eiheiji town, Japan

P30 RAPAMYCIN REDUCES DEVELOPMENT OF NEUROPATHIC PAIN AFTER SPINAL CORD INJURY IN MICE.

Satoshi Tateda, Haruo Kanno, Hiroshi Ozawa, Kenichiro Yahata, Seiji Yamaya, Eiji Itoi
Orthopaedic Surgery, Orthopaedic Surgery of Tohoku University Graduate School of Medicine,
Sendai, Japan

P31 LOW-ENERGY EXTRACORPOREAL SHOCK WAVE THERAPY PROMOTES VEGF EXPRESSION AND DEMONSTRATES A NEUROPROTECTIVE EFFECTS AFTER SPINAL CORD INJURY IN RATS

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Orthopaedic Surgery, Tohoku University Graduate School of Medicine, Sendai, Japan

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McGill Scoliosis & Spine Centre, McGill University Health Centre, Montreal, Canada, Department of orthopedic surgery, King Abdulaziz University, Jeddah, Saudi Arabia

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Tetsuo Hayashi, Takeshi Maeda, Eiji Mori, Tsuneaki Takao, Keiichiro Shiba
Spinal Injuries Center, Orthopedic Surgery, Fukuoka, Japan

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VU University Medical Center (VUmc), Orthopedic Surgery, Amsterdam, Netherlands

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Pieter-Paul A. Vergroesen, Albert j. van der Veen, Kaj S. Emanuel, Barend J. van Royen, Idsart Kingma, Theo H. Smit
Orthopaedic Surgery, VU University Medical Center, Amsterdam, Netherlands

Cervical Spine**P36 LATERAL MASS SCREWS ACCORDING TO A MODIFIED ROY-CAMILLE TECHNIQUE FOR POSTERIOR CERVICAL SPINE STABILIZATION. RESULTS FROM 496 SCREWS (62 PATIENTS)**

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Hospices Civils de Lyon and University Claude Bernard, Lyon, France

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Orthopaedic surgery, Municipal Hopsital, Tokushima, Japan

- P38** RESULTS OF AN INDEPENDENT STATISTICAL ANALYSIS FROM THE FDA-APPROVED CLINICAL AND RADIOGRAPHIC STUDY OF THE PRESTIGE LP CERVICAL DISC AT 24 MONTHS
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Spine Research Center, Saint Louis, USA
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Gyu Yeul Ji, Chang Hyun Oh, Jae Kyun Jeon, Dong Ah Shin, Young Sul Yoon, Keung Nyun Kim
Department of Neurosurgery, Guro Teun Teun Hospital, Seoul, Korea; Department of Neurosurgery, Spine and Spinal Cord Research Institute, Yonsei University College of Medicine, Seoul, Korea
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Shigeru Kobayashi, Katsuhiko Hayakawa, Takashi Nakane, Riya Kosaka
1.Department of Orthopaedic and Rehabilitation Medicine, Faculty of Medical Sciences, The University of Fukui, Fukui, Japan; 2,3. Department of Orthopaedic Surgery, Aiko Orthopaedic Hospital, Aichi, Japan; 4.Department of Orthopaedic Surgery, Hirakata City Hospital, Osaka, Japan
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Department of Orthopedic Surgery and Rehabilitation, Zakopane, Poland
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Andreas Lunzer, Andreas Peter, Petra Krepler, Josef Georg Grohs, Renhard Windhager
Department of Orthopedics, Medical University Vienna, Vienna, Austria
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Fukuoka Wajiro Hospital, Department of spine and spinal surgery, Fukuoka city, Japan
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Spine Center, Department of Orthopaedic Surgery, Niigata, Japan
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Mitoyo General Hospital, Kagawa Orthopedic Surgery, Kagawa, Japan
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Department of Orthopaedics and Rehabilitation Medicine, Faculty of Medical Sciences, Fukui, Japan
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Department of Orthopedic Surgery, Faculty of Medicine, Tottori University, Yonago, Japan
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Hokkaido Orthopaedic Memorial Hospital, Dept. of Orthopaedic Surgery, Sapporo, Japan

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Seiichi Odate, Jitsuhiko shikata, Satoru Yamamura, Tsunemitsu Soeda
Gakkentoshi Hospital, Orthopaedic Surgery, Kyoto, Japan
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Saitama Red Cross Hospital, Orthopaedic Surgery, Saitama, Japan
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Kansai Rosai Hospital, Orthopaedic Surgery, Amagasaki, Japan
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Peking Union Medical College Hospital, Chinese Academy of Medical Science, Peking Union Medical College, Beijing, China
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Growing Spine Deformities

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Department of Orthopedics, The 2nd Affiliated Hospital of Kunming Medical University, Yunnan Province, Kunming, China

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Nagoya University Graduate School of Medicine, Department of Orthopaedic Surgery, Nagoya, Japan
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Orthopedics and Traumatology, Istanbul Spine Center, Istanbul, Turkey

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Department of Orthopedic Surgery, Niigata University Medical and Dental Hospital, Niigata, Japan
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Orthopaedic Surgery, National University Health System, Singapore, Singapore
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Kwang Chear Lee, Shakil Patel, Philip Sell
Orthopaedics, Leicester General Hospital, Leicester, United Kingdom
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Department of Orthopaedic surgery, Fukuyama medical center, Fukuyama Hiroshima, Japan
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Seiji Tomita
Saiseikai Ibaraki Hospital, Orthopaedic Surgery, Ibaraki, Japan
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Spine Center, Nagano, Japan
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Department of Orthopaedic Surgery, Leipzig, Germany
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Departments of Orthopaedic Surgery, Eniwa city, Japan

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Wednesday, October 1, 2014

12:00-14:00

LUNCH WORKSHOPS

Lounge Pasteur

MEDTRONIC

Focus on Degenerative : Treating and Fusing Aging Spine Patients What are the lessons learned?



Jörg Franke, France - Duccio Boscherini, Switzerland - Patrick Kiely, Ireland

Room Tête d'Or 2

GLOBUS

Latest innovations in Total Motion Segment Preservation.



Room Rhône 3B

INVIBIO

Expert panel : do PEEK-OPTIMA® spinal rods constructs bridge the treatment gap?



Room Rhône 1

JOIMAX

Minimally Invasive Endoscopic Surgery: Where are we to date? TESSYS® / iLESSYS®, Degenerative indications, UK Study Report, German Study Report, NL Study Report, EndoLIF® / Percusys®, CESSYS®, Discussion.



Dr. Ralf Wagner - Dr. Alastair Gibson - Dr. Guntram Krzok - Dr. Menno Ipreburg

Room Bellecour 3

ZIEHM IMAGING

Controversies in intraoperative spinal imaging mobile vs. fixed systems. Christian Krebek, Germany - Christoph Josten, Germany - Christian Racopoulos, Belgium Peter Vajkoczy, Germany



Room Roseraie 2

EOS IMAGING

EOS added value in Spine pathologies treatments



Room St Clair 2

SIGNUS MEDIZINTECHNIK

Fusion and non-Fusion Treatment Options: Current Clinical Concepts. Motion preservation in the cervical spine: Indications, pros and cons of cervical disk arthroplasty. Clinical experience. Debridement and fusion with polyetheretherketone implants in purulent spondylodiscitis. a clinical experience.



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2014

Thursday, October 2, 2014

12:00-14:00

LUNCH WORKSHOPS

Room Bellecour 1

ALPHATEC



Less Invasive Solutions: Complex Spine Pathology "MIS Lumbar Long Fixation"
"The Use of Zodiac and TeCorp in Surgical Decompression and Spinal Reconstruction of patients with Vertebral Metastases"

Jayesh Trivedi, Oswestry, UK - Michael Wong, Australia - Nikolai Gabrovsky, Bulgaria

Room Rhône 3A

AOSpine



AOSpine Knowledge Forum - Infections

Room St Clair 3B

BAXTER



Room Rhône 1

BIOMET



"Current Concepts in 360° Lumbar Fusion"

Mr Nicholas BIRCH, Dr. Marco Teli, Dr. Jasper Wolfs, Dr. Hagen Skibbe,
Dr. Ryan DenHaese, Dr. Bart Poffyn,

Room Tête d'Or 1

DEPUY SYNTHES



Direct Vertebral Derotation in AIS : myth or reality ? Ulf Liljenqvist, Germany

Room Bellecour 3

EUROPEAN SPINE JOURNAL



European Spine Journal, how to do good reviews ? Constantin Schizas

Room St Clair 4

Eurospine Company



Transforaminal cage, New Technology. Pr Fuentes

Room Tête d'Or 2

GLOBUS



Application of expandable interbody cages in MIS

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Thursday, October 2, 2014

12:00-14:00 LUNCH WORKSHOPS

Room Roseraie 2



K2M
Adolescent / Pediatric

Room Rhône 3B



MEDACTA

Room Rhône 2



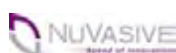
MEDICREA
Innovative technology solutions to spinal deformity: personalized spine surgery

Lounge Pasteur



MEDTRONIC
Focus on Deformity : Realigning through Osteotomies What are the right tools to make it easier to achieve?
Pierre Roussouly, France - Ian Harding, UK - Jean-Charles Le Huec, France

Room St Clair 2



NUVASIVE
XLIF Deformity and Advanced Applications

Room St Clair 3A



PREMIA SPINE
Surgical alternatives for Severe Spinal Stenosis and Spondylolisthesis Decompression & Fusion Vs TOPSTM System Posterior Arthroplasty

Room St Clair 1



SPINeway
Adolescent Scoliosis Treatment: Experience with a Global Direct Correction System
Karen Weissmann. Chile - Philippe Mazeau, France - Carlos Barrios, Spain

17:30-18:30 WORKSHOP

Room Gratte Ciel 2



MEDTECH
HOT TOPIC SESSION :
"Robotic assistance and image guided surgery: early experience of spine application"

Friday, October 3, 2014

12:00-14:00

LUNCH WORKSHOPS

Room St Clair 4


KISCO Cervical spine kyphosis: what are the surgical options?

- Main biomechanical characteristics of the cervical spine and indications for fusion or non-fusion.

Dr Marco Teli, Orthopaedic Department - Civile Hospital, Legnano - Italy

- Indications, surgical technique and clinical follow up with "C'Varlock" - a cervical in terbody cage with lordosis adjustment

Dr Mikael Orabi, Neurosurgery Department - University Hospital Lariboisière, Paris - France

Lounge Pasteur


MEDTRONIC

Focus on Fracture : Navigating your way around Fracture Care : Do you know the Optimal route ?

Charles Court, France John-Michael Duff, Switzerland Yann-Philippe Charles, France

Room Tête d'Or 2


AOSpine The new AOSpine Spine Injury Classification System

- TLICS, AO-Magerl and others - Why do we need a better classification?

Moderator: Max Reinhold

- The new AOSpine Thoracolumbar Spine Injury Classification System

Moderator: Klaus Schnake

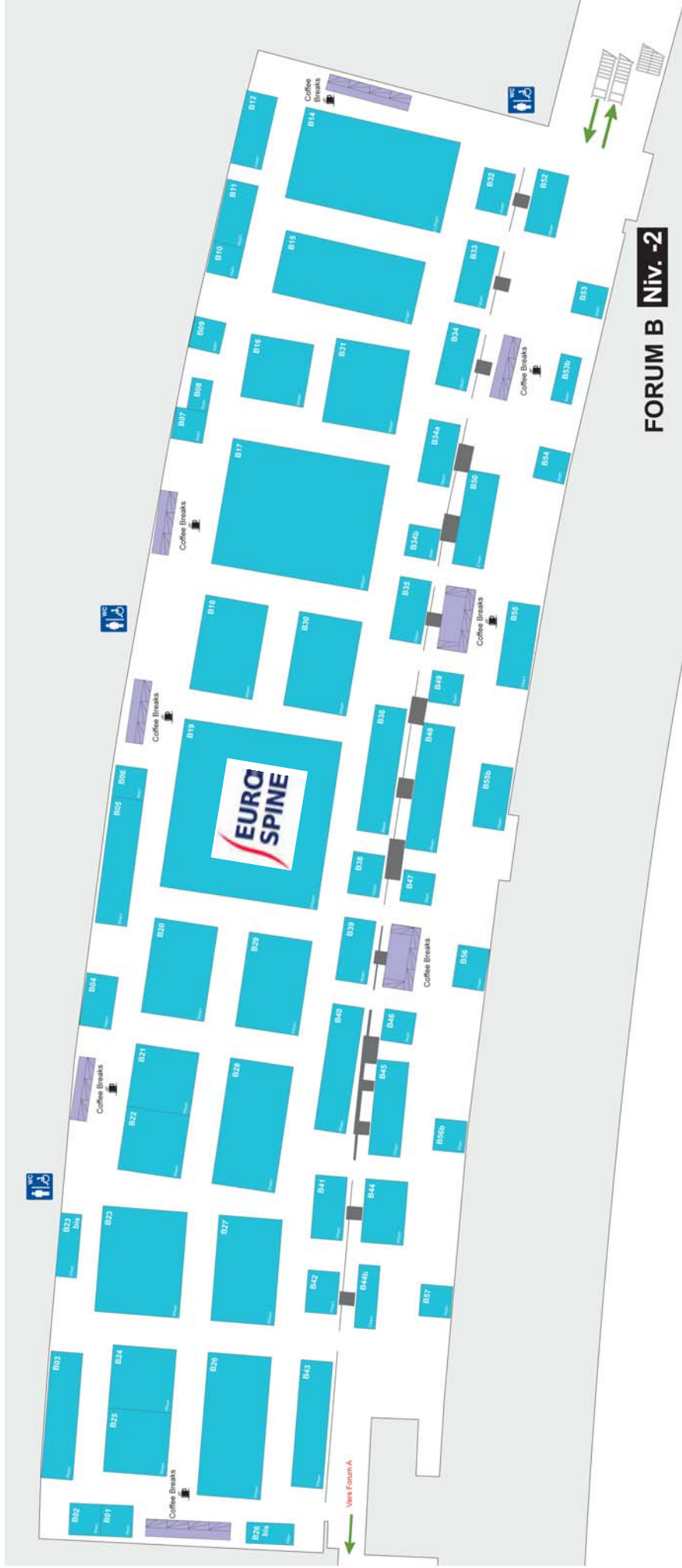
- Outlook on the upcoming AOSpine Subaxial Spine Injury Classification System

Moderator: Cumhur Öner

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AURORA SPINE.....	A54	LISI MEDICAL.....	A30
BaiDe MEDICAL.....	A60	MAZOR ROBOTICS.....	A57
BAXTER HEALTHCARE SA.....	A65t	MEDIC MICRO.....	A68b
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CADWELL.....	A42	NOVASPINE.....	A47
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CG BIO.....	A53	ORTHOPEDIATRICS Corp.....	A55
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DORSA Vi.....	A11	RICHARD WOLF GmbH.....	A71
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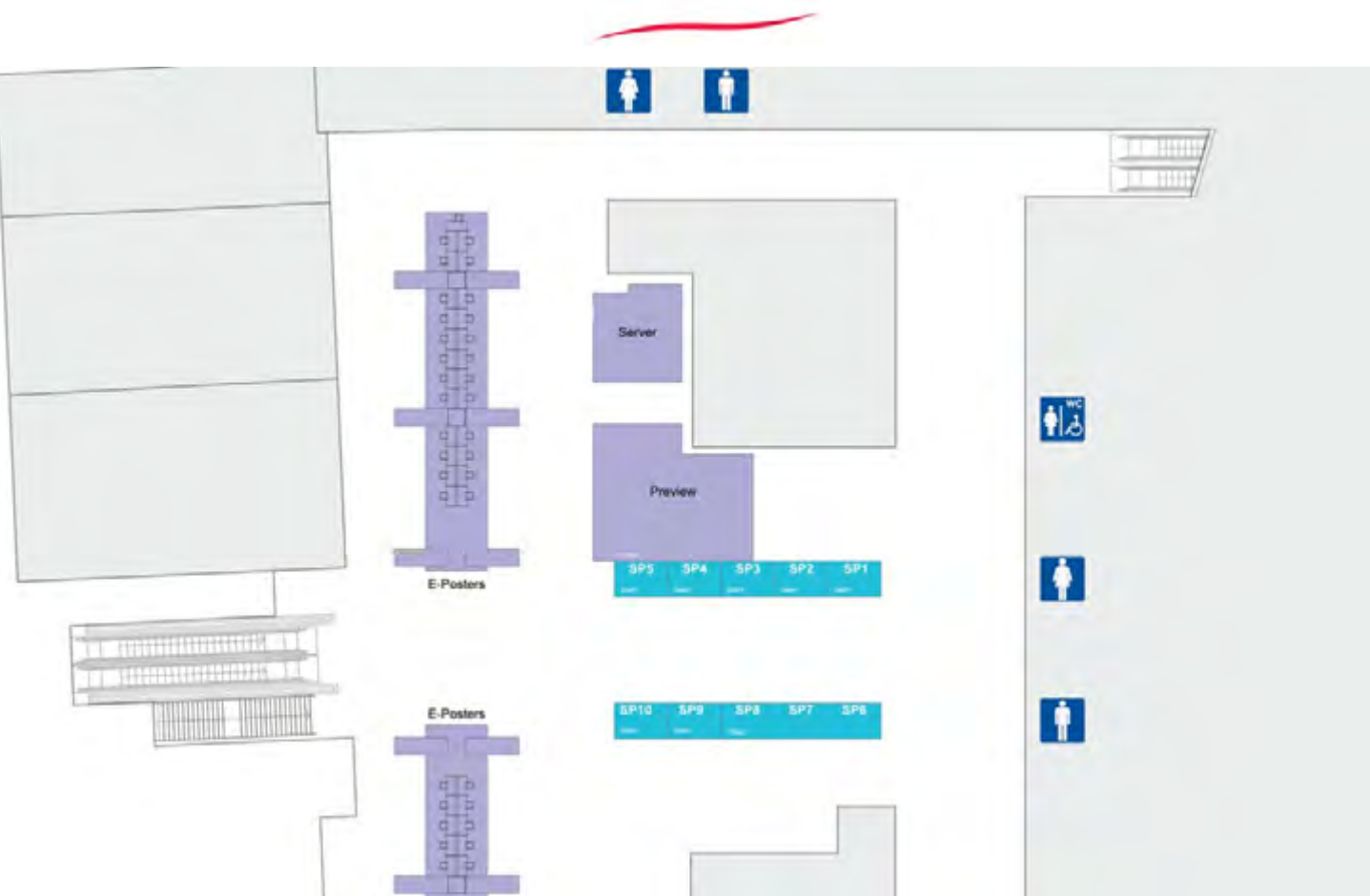


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alphabetical order

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QUICK FACTS

When:	March 23-27, 2015
Where:	Barcelona, Spain
Maximum Attendees:	30 participants (priority will be given to EUROSPINE members)
Schedule:	Course must be attended from Monday through Friday
Registration Fee:	EUR 400,- for EUROSPINE members EUR 600,- for non-members
CME Credits:	Applied (27 CME)
Language:	English

CORE FACULTY

Margareta Nordin Dr. Med. Sci.¹
Christine Cedraschi PhD
Pierre Côté PhD
L. Rachid Salmi MD PhD
Ferran Pellisé MD PhD²

CLINICAL FACULTY

Federico Balagué MD
Marco Campello PhD
Björn Rydevik MD PhD
Marek Szpalski MD

MODULES

- Conceptual Overview of Clinical Research
- Randomized Controlled Trials
- Cohort Studies
- Systematic Reviews
- Qualitative Studies

¹ Course Director

² Local Host

More Information and Registration at
www.eurospine.org/ResearchCourse
until February 27, 2015

Future Meetings



EUROSPINE 2014

October 1-3
Lyon, France

Task Force Research Course 2015

March 23-27
Barcelona, Spain

2nd Spring Speciality Meeting 2015

- a joint Meeting with SRS
April 23-25 - Barcelona, Spain

EUROSPINE 2015

September 2-4
Copenhagen, Denmark

EUROSPINE 2016

October 5-7
Berlin, Germany

EUROSPINE 2017

October 11-13
Dublin, Ireland



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EuroSpine 2014
Exhibit Stand # B43
Located in Hall B

LUNCH SYMPOSIUM

Thursday, October 2

12:00 - 14:00 (Lunch Workshop) • Roseaie 2 (Level 3)

Current Concepts & Future Directions for Managing
Pediatric & Adolescent Spinal Deformities

WORKSHOP FACULTY:

Benny Dahl, MD, PhD, DMSci
René Castelein, MD, PhD
Enrique Garrido, MD

Surgical Technique Demonstrations:
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Notes



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Notes



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WITH YOU

EVERY STEP OF THE WAY.

PLEASE JOIN US

DePuy Synthes Welcome Reception

Wednesday, 1st of October, 2014

From 19.00 / Hotel Hilton

DePuy Synthes Symposium

Thursday, 2nd of October, 2014

12.00 – 14.00 / Tête d'Or 1 (level 1)

Direct Vertebral Derotation in AIS:

Myth or Reality?

Chairman:

Prof. Dr. med. Ulf Liljenqvist

(Germany)

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ROMEO®_{MIS} : dispositif médical implantable et remboursé de classe III indiqué dans le traitement des spondylolisthésis, maladie dégénérative du disque, fracture du rachis thoraco-lombaire, tumeur vertébrale thoraco-lombaire, pseudotumor, spondylite et déviation du rachis : scoliose, cyphose. Organisme certificateur : S2S. Toutes les informations complémentaires figurent sur la notice d'utilisation qui accompagne nos implants.

ROMEO®_{PAD} : dispositif médical implantable et remboursé de classe III indiqué dans le traitement des maladies dégénératives du disque, spondylolisthésis dégénératif grade I, sténose du canal médullaire, stabilisation après décompression du canal médullaire, après d'une fusion et pseudotumor. Organisme certificateur : S2S. Toutes les informations complémentaires figurent sur la notice d'utilisation qui accompagne nos implants.

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