

37th Annual Meeting

Cervical Spine
Research Society - Europe



www.csrseurope.org

15-16-17 June 2022 - **Barcelona · Spain**

SCIENTIFIC PROGRAM



37th Annual Meeting

Cervical Spine
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15-16-17 June 2022
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GENERAL INFORMATION

CONGRESS FORMAT

- The meeting is held in Barcelona, in the [AXA congress centre](#), located in the City Center, surrounded by hotels, restaurants, fast food and a large fashion shopping center.
- 300-500 attendees are expected.
- This will be a special meeting giving academics and industry partners to further develop cervical spine surgery and continue educational growth and maintenance. The CSRS Europe has a long history with good cooperation with industry and expects a dedicated support of our industrial partners.
- As in other years we will attract an international faculty, participants from all over the world and invited guest lectures of world-renowned experts.

CONGRESS DATES

15-17 June 2022 in Barcelona

[Congress opening](#)

Wednesday, 15th June: 6.30 pm

[Congress ending](#)

Friday, 17th June: 5.30 pm

IMPORTANT DATES

[Registration](#)

Early Bird: February 15th, 2022

Late fee: May 1st, 2022

[Abstract Submission](#)

Opens: December 1st, 2021

Closes: March 1st, 2022

REGISTRATION FEES

[Early bird:](#) From February 15th 2022

Participant: 550€ | Resident: 300€ | Faculty: 250€

[Late fee:](#) From May 1st 2022

Participant: 650€ | Resident: 375€ | Faculty: 250€

[Onsite](#)

Participant: 750€ | Resident: 450€ | Faculty: 250€

CONTACT DETAILS

Organizer

CSRS-Europe

Cervical Spine Research Society Europe

www.csrs-europe.org



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GENERAL INFORMATION

Language

The official language of the congress is English. No simultaneous translation will be provided.

Registration & Abstract Submission

Only through the Association website:
www.csrs-europe.org

Wireless Internet Access

WiFi Internet access area will be available at the Congress venue.

Accommodation Details

Accommodation details are available at the website and further announcements.

Smoking

CSRS 2022 is a non-smoking congress.

Attendance

The Congress usually attracts between 300 and 500 delegates from all over Europe and from all over the World.

Name Badges

Participants and accompanying persons are obliged to wear the official Congress name badges on all Congress occasions.

Exhibition

Access to the exhibition is free for registered participants. The exhibition will be open during the congress hours.

Lunch and Refreshments

Lunches are not included in the participants' registration fee. Coffee, tea will be available in the exhibition area during the breaks.

Certificate of Attendance

Participants will receive a certificate of attendance at the Congress.

Liability

By registering for the Congress and/or by participating in the exhibition joined to the Congress, participants and exhibitors agree that CSRS, the Organizing Committee or the Congress Secretariat do not assume any responsibility for damage or injuries to persons or property during the Congress. Participants and exhibitors are advised to organize their own health, travel and personal insurances.

Letter of Invitation

Upon request, the Chairman of the Local Organizing Committee will be pleased to send a personal letter of invitation so as to enable participants to obtain supporting funds or visas for attending the Congress. These invitation letters cannot be considered as an offer of financial support by the organizers.

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CONGRESS VENUE

Axa Convention Centre

Avinguda Diagonal, 547,
08029 Barcelona, Spain
www.axa.es



MAIN AUDITORIUM:
597 seats
ROOM 1: 150 seats
ROOM 2: 40 seats
ROOM 3: 70 seats



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Scientific Grid

WEDNESDAY, 15th JUNE	
18.30 - 20.00 h	WELCOME RECEPTION

THURSDAY 16th JUNE	
08.20 - 08.30 h	WELCOME ADDRESS
08.30 - 09.30 h	LECTURE SESSION 1 Mario Boni Grant Nominated Oral presentations
09.30 - 10.30 h	LECTURE SESSION 2 Degenerative cervical spine
10.30 - 11.00 h	Coffee Break
11.00 - 11.30 h	DEBATE 1 Cervical trauma and the SLIC score
11.30 - 12.00 h	DEBATE 2 Clivus chordoma: is the goal still radical resection?
12.00 - 12.30h	 PRESIDENTIAL LECTURE James Harrop, president of CSRS Northern America
12.30 - 14.00 h	Industry Lunch Symposium
14.00 - 15.00 h	LECTURE SESSION 3 Advances in radiology in cervical spine
15.00 - 15.30 h	DEBATE 3 Should we order patients to stop smoking before we put in screws?
15.30 - 16.15 h	 INVITED GUEST LECTURE Timothy R. Smith
16.15 - 16.45 h	DEBATE 4 Medullary compression in the straight spine
16.45 - 17.15 h	Coffee Break
17.15 - 18.15 h	LECTURE SESSION 4 Cervical myelopathy and its challenges
18.15 - 18.45 h	Preview Annual meeting 2023 AP, 2022 NA and 2023 Europe
18.45 - 19.15 h	 CSRS Europe General Assembly

FRIDAY 17th JUNE	
08.30 - 09.30 h	LECTURE SESSION 5 Bone and ligament disease of the cervical spine
09.30 - 10.30 h	LECTURE SESSION 6 Deformity and degeneration of the cervical spine
10.30 - 11.00 h	Coffee Break
11.00 - 11.30 h	 PRESIDENTIAL LECTURE Prof. Hisanori Mihara, President of CSRS Asia Pacific
11.30 - 12.00 h	DEBATE 5 Surgical approach for craniocervical steno- sis with basilar invagination
12.00 - 12.30h	DEBATE 6 ML: Prediction of clinical outcomes after cervical spine surgery improve by use of AI
12.30 - 14.00 h	Lunch
14.00 - 15.00 h	LECTURE SESSION 7 Degenerative disc disease and anterior approach
15.00 - 15.30 h	DEBATE 7 Strategy for treatment of geriatric odontoid and other C2 fractures
15.30 - 16.00 h	DEBATE 8 Frailty of patients is a factor in predicting outcome
16.00-16.30 h	Coffee Break
16.30-17.00 h	MY WORST CASE
17.00-17.10 h	AWARD SESSION
17.10-17.15 h	FINAL REMARKS

SCIENTIFIC PROGRAM

MAIN TOPIC
CONTROVERSIES IN SPINE SURGERY
NEED PREDICTION MODELS

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SCIENTIFIC PROGRAM | Wednesday, 15th June

18.30-20.00 h **WELCOME RECEPTION**
Location: Congress Venue

SCIENTIFIC PROGRAM | Thursday, 16th June

07.20-08.20 h **BREAKFAST**

08.20-08.30 h **WELCOME ADDRESS**
Heiko Koller and Andrés Combalia

08.30-09.30 h **LECTURE SESSION 1**
Mario Boni Grant Nominated Oral presentations
Moderators: Claes Olerud and Cédric Y. Barrey

Neuromonitoring of recurrent laryngeal nerve using continuous intraoperative neuromonitoring system during anterior cervical spine surgery: A porcine model study
Dong Suk Kim

Dynamics of C1/2 rotation related to age, sex, and smoking- a population study of 308 patients
Jan Lodin

Pull-out resistance of Facet versus Laminar C2 screws: an experimental comparative biomechanical investigation
Alexandre Meynard

Foraminotomy or anterior cervical discectomy: 1-year clinical trial results (FACET)
Anne Broekema

Comparative effectiveness of surgical approaches for cervical myelopathy: 4-year quality of life assessments from the CSM-S RCT
Zoher Ghogawala

Early versus Delayed Surgery for Incomplete Cervical Spinal Cord Injury with Pre-existing Cervical Stenosis: The OSCIS Randomized Clinical Trial
Hiroataka Chikuda

Discussion

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SCIENTIFIC PROGRAM | Thursday 16th June

09.30-10.30 h

LECTURE SESSION 2

Degenerative cervical spine

Moderators: Felix Tomé- Bermejo and Massimiliano Visocchi

A randomised controlled trial comparing the effectiveness of surgical and nonsurgical treatment for cervical radiculopathy

Mirad Taso

Improvement rates and predictors of clinical outcome following surgery for degenerative cervical myelopathy

Eddie de Dios

Diagnosis of C4 radiculopathy

Yasuhisa Tanaka

Is Routine Blood Typing and Screening Necessary for Degenerative Cervical Spine Surgery Patients in Specialty Surgical Hospitals?

Jorge Nuñez

Gap between flexion and extension ranges of motion: a novel indicator to predict the loss of cervical lordosis after laminoplasty in patients with cervical spondylotic myelopathy

Takashi Fujishiro

Fusion rate of transected spinous processes after unilateral open door cervical laminoplasty

Keiichi Iseda

Surgery for degenerative cervical myelopathy in the elderly: Worthwhile or futile?

Tonje Okkenhaug Johansen

Cervical facet joint effusion: a sign of instability in cervical degenerative spondylolisthesis

Shrikant Sagane

Discussion

10.30-11.00 h



Coffee Break

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SCIENTIFIC PROGRAM | Thursday 16th June

11.00-11.30 h

DEBATE 1

Cervical trauma and the SLIC score

Case presented and moderated by Anna MacDowall

Debater 1: I do not need prediction score

Jeremy Reynolds

Debater 2: AO scoring is an excellent help in deciding what to do

Nuno Neves

11.30-12.00 h

DEBATE 2

Clivus chordoma: is the goal still radical resection?

Moderator: Carmen Vleggeert-Lankamp

Debater 1: Surgical resection is still the standard of reference

Deszoe Jeszenszky

Debater 2: Radiation has pushed back surgery as first choice of treatment

Ciaran Bolger

12.00-12.30 h



PRESIDENTIAL LECTURE

Update of Cervical trauma

James Harrop, president of CSRS Northern America

12.30-14.00 h



Lunch break, Industry sponsored symposium

14.00-15.00 h

LECTURE SESSION 3

Advances in radiology in cervical spine

Moderators: Rafael González and Jordi Rimbau

Development of an MRI score for the severity of degenerative cervical myelopathy (SIMS). Clinical and electrophysiological correlation about 99 cases.

Cédric Y. Barrey

The Artificial Intelligence Motion study (AIM): Artificial Intelligence-assisted image recognition of cervical spine motion.

Valérie NE Schuermans

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Deep Learning for Adjacent Segment Disease at Preoperative MRI for Cervical
Radiculopathy

Caroline Goedmakers

Radiological and clinical features of increased signal intensity of spinal cord
extending to vertebral body level on T2 MRI in patients with cervical spondylotic
myelopathy

Kazuya Kitamura

Magnetic Resonance Diffusion Tensor Imaging and functional neurophysiological
study in patients with degenerative cervical spinal stenosis

Paloma Bas

Analysis of Influence Factors of Anterior Bone Loss after Cervical Disc Arthroplasty
and it's Effect of Postoperative Outcomes

Jumbo He

The fate of failed cervical arthroplasties: outcome of revision surgery

Catarina Marques

New device for improved decompression in anterior cervical corpectomy and fusion
and anterior cervical discectomy and Fusion (ACDF) Procedures: Case Series and
Technique

Ely Ashkenazi

Discussion

15.00-15.30 h

DEBATE 3

**Should we order patients to stop smoking before we put in
screws?**

Case presented and moderated by Michael Mayer

Debater 1: I do not see why we should ask the patient to stop smoking

Bastian Storzer

Debater 2: I put an effort in it, the patient should also pledge an offer

Mark Arts

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SCIENTIFIC PROGRAM | Thursday 16th June

15.30 – 16.15 h



INVITED GUEST LECTURE

Timothy R. Smith: Ass professor Brigham and Women's Hospital, Harvard Medical School, Boston, Director of the Computational Neuroscience Outcomes Center

Digital Phenotyping: Can Smartphones, Real World Data and Machine Learning Translate into Quality of Life in Spine Patients?

16.15-16.45 h

DEBATE 4

Medullary compression in the straight spine

Case presented and moderated by Oscar L. Alves

Debater 1: Choose the site where the most compression is present and focus there

Francesco Tamburelli

Debater 2: In a straight spine you want to avoid kyphosis, thus choose for balance correction

Heiko Koller

16.45-17.15 h



Coffee Break

17.15-18.15 h

LECTURE SESSION 4

Cervical myelopathy and its challenges

Moderators: Lluís Aguilar and Bruce Darden

Early mortality in elderly patients with isolated C2 odontoid fracture treated by halo vest immobilization, anterior spinal fixation, or posterior spinal

Akira Honda

Identification of risk factors for odontoid fracture nonunion: Predictive modelling in a retrospective multi-center approach

Iris Leister

Long-term changes in sagittal alignment and their clinical and radiological implications after anterior 1-2 level corpectomy cage subsidence for degenerative cervical disease

Felix Tomé-Bermejo

Chin incidence: a novel predictor of Cervical sagittal alignment

Majed O. Aljuaid

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Comparison of Surgical Outcomes after Anterior Cervical Decompression and Fusion and Muscle-preserving Selective Laminectomy in Patients with Degenerative Cervical Myelopathy

Kazuya Kitamura

Screening for Degenerative Cervical Myelopathy (SCREEN-DCM) in Patients Based on Signs, Symptoms and Known Risk Factors: Preliminary Results

Aria Nouri

Differences in clinical characteristics of patients undergoing spinal surgery for posterior longitudinal ligament ossification-associated cervical/thoracic myelopathy and those with degenerative diseases

Shinsuke Yoshida

Minimally invasive lateral occipitocervical fixation – case series and technique description

Stanislaw Adamski

Discussion

18.15-18.45 h

PREVIEW ANNUAL MEETING 2023 AP, 2022 NA AND 2023 EUROPE

Prof. Hisanori Mihara

Prof. James Harrop

Anna MacDowall

18.45-19.15 h

CSRS EUROPE GENERAL ASSEMBLY



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SCIENTIFIC PROGRAM | Friday 17th June

07.20-08.30 h

BREAKFAST SYMPOSIUM | INDUSTRY SPONSORED

08.30-09.30 h

LECTURE SESSION 5

Bone and ligament disease of the cervical spine

Moderators: Ana Garcia de Frutos and Christian Mazel

The innovative viscoelastic CP ESP cervical disc prosthesis with six degrees of freedom: A prospective study of 96 implantations with a minimal follow up of 2 years up to 10 years

Olivier Ricart

5-year outcomes after a second-generation cervical spine arthroplasty

Jorge Nuñez

Correlation between Horizontal gaze and Sagittal Cervical Alignment New morphological parameters correlated to Sagittal Cervical Parameters

Fethi Laouissat

Intraoperative Foot Dorsiflexion Technique to Visualise the Lower Cervical Spine: A series of 25 cases

Renée Cruickshank

Subaxial Kyphosis and Significance of O-C1 Angle After Posterior C1-C2 Fusion for Atlantoaxial Dislocation

Jong-Hyeok Park

Angulation-Errors in iCT navigated dorsal instrumentation of the spine. An interim analysis of intraoperatively planned trajectories vs. definitive screw placement.

Ulf Bertram

Transplanting nasal mucosa derived olfactory ensheathing cells into injured cervical spinal cord restores neurological hand function

Ahmed Ibrahim

Multilevel cervical myelopathy: What is the role of the clinical and radiographic appearance in the choice of the surgical approach?

Mauro Costaglioli

Discussion

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09.30-10.30 h

LECTURE SESSION 6

Deformity and degeneration of the cervical spine

Moderators: Andrés Barriga and Matias Alfonso

Do flare-ups in systemic Disease Activity correlate to cervical deformity in patients with Rheumatoid Arthritis?

Anna Lebouille Veldman

Biologic Agents Preserve the C-2 Pedicle in Patients with Rheumatoid Arthritis: A Comparative Imaging Study Using Three-Dimensional Computed Tomography

Takuya Obo

Cage versus Tricortical Bone Graft for Anterior Cervical Discectomy and Instrumented Fusion

Rajiv Maharjan

Translation, adaptation and validation of the Spanish version of the Japanese Orthopaedic Association Cervical Myelopathy Evaluation Questionnaire

Manuel Ramírez Valencia

Criteria for classifying the severity of DCM into mild, moderate and severe according to the Myelopathy Disability Index

Alba Pons Carreto

Results on cervical posterior percutaneous interbody fusion (DTRAX)

Antonio Vilatela Gómez

Concomitant Trauma of Brain and Upper Cervical Spine: a tertiary centre institutional case series

Andreas Demetriades

Comparing the 24-month IDE results from a PEEK/ceramic (P/C) cervical total disc replacement (cTDR) with all other US FDA approved cTDR devices

Pierce Nunley

Discussion

10.30-11.00 h



Coffee break

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11.00-11.30 h



PRESIDENTIAL LECTURE

Awareness and learning gained from my experience with intractable cases of cervical disorders

Prof. Hisanori Mihara, President of CSRS Asia Pacific

11.30-12.00 h

DEBATE 5

Surgical approach for craniocervical stenosis with basilar invagination

Moderator: Heiko Koller

Debater 1: Surgical Approach to Basilar Invagination

Jörg Klekamp

Debater 2: Treatment of the atlantoaxial instability is the key

Gergely Bodon

12.00-12.30 h

DEBATE 6

ML: Prediction of clinical outcomes after cervical spine surgery improve by use of AI

Case presented and moderated by Ronald Bartels

Debater 1: I like to give my patient a prediction on future problems

Carmen Vleggeert-Lankamp

Debater 2: Clinical equipoise and medical judgment will remain main skills for outcome prediction

Ahmed Ibrahim

12.30-14.00 h



Lunch

14.00-15.00 h

LECTURE SESSION 7

Degenerative disc disease and anterior approach

Moderators: Máximo Alberto- Díez Ulloa and Prof. Takachika Shimizu

Impact of COVID-19 protocols on perioperative complications after posterior fusion surgery for acute spinal cord injury: A propensity score-matched analysis

Hiroki Ushirozako

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Clinical adjacent segment pathology after anterior cervical discectomy, with and without fusion, for cervical degenerative disc disease: a single center retrospective cohort study with long-term follow-up

Valérie NE Schuermans

Cervical Disc Arthroplasty- Biomechanical Considerations of Caprine, Modeling, and Human Literature Review

Jamie L. Baisden

Cervical Total Disc Replacement: Available Implant Size Matters

Pierce Dalton Nunley

Can Baseline Disability Limit Clinical Improvement After Surgical Correction of Cervical Deformity?

Peter Passias

Outcomes in Patients with Vertebral Injury after Blunt Cervical Spine Trauma

Eric Truumees

Identifying Intra-operative C2 Slope Thresholds for Optimal Functional and Clinical Outcomes in Cervical Deformity Correction

Peter Passias

Discussion

15.00-15.30 h

DEBATE 7

Strategy for treatment of geriatric odontoid and other C2 fractures

Case presented and moderated by Cédric Y. Barrey

Debater 1: Surgical fixation is the better option

Petr Vacchata

Debater 2: Non-surgical treatment and observation is preferable

Federico de Iure

15.30-16.00 h

DEBATE 8

Frailty of patients is a factor in predicting outcome

Moderator: Anna MacDowall

Debater 1: Frailty is one of the main parameters influencing outcome in spine surgery

Kazu Kitamura

Debater 2: Frailty is so multifactorial that it should not play a major role

Aria Nouri

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16.00-16.30 h  Coffee Break

16.30-17.00 h **MY WORST CASE**
Moderator: Philippe Bancel
Clinical case
Antonio Martin Benlloch
Clinical case
Carlos Villas
Clinical case
tbd

17.00-17.10 h **AWARD SESSION**
Moderators: Claes Olerud and Cédric Y. Barrey

17.10-17.15 h **FINAL REMARKS**
Heiko Koller

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