

Introduction to Spinal Endoscopy Course

26 June 2025 | IRCAD, Strasbourg, France



General Information

EUROSPINE, the Spine Society of Europe c/o Pfister Treuhand AG Bankstrasse 4, 8610 Uster-Zurich, Switzerland

W: www.eurospine.org

Chair of Education Committee

Paulo Pereira

E: educationl@eurospine.org

Director of Education and Research

Julie-Lyn Noël

E: noel@eurospine.org

Education and Research Manager

Oriana Pivetta

E: pivetta@eurospine.org

Course Chairs

Bertrand Debono, France Frank Hassel, Germany

Course Faculty

Adad Baranto, Sweden
Joseph Cristini, France
Guillaume Lonjon*, France
Thibault Remacle, Belgium
Christoph J. Siepe, Germany
Ralf Wagner, Germany

*e-learning faculty

Programme Goal

Starting with Endoscopic Spine Surgery

Endoscopic spine surgery is becoming the ultimate tissue-preserving technique to treat many spine pathologies, with accumulating evidence supporting its efficacy and reduced complication rate. This has generated massive interest among surgeons worldwide to learn and adopt this technology. This course will help you take the first steps in spinal endoscopy or widen the spectrum of the procedures you offer to your patients, allowing you to achieve highly rewarding and excellent surgical outcomes in spinal and stenosis surgery in the lumbar spine.



Quick Facts

| LIVE SESSION DATE & TIME | 26 June 2025 (07:50-18:15 CEST) | |
|-----------------------------|--|--|
| VENUE | IRCAD, 1 Pl. de l'Hôpital, 67000 Strasbourg, France | |
| MAX. ATTENDEES | 24 delegates maximum | |
| REGISTRATON FEES | EUROSPINE Member: €800 Non-member: €1,000 | |
| CME CREDITS | Accreditation by the European Accreditation Council for Continuing Medical Education (EACCME) is pending. | |
| LANGUAGE | English | |
| DRESS CODE | Smart casual | |
| E-LEARNING | A computer (Mac/PC) or tablet (Android/Mac) and stable internet connection are required to access the e-learning content. The e-learning component is self-paced and will be available from 15 May 2024 on the EUROSPINE Learning Management System (LMS). The e-learning must be completed by the start of the live session. | |
| COURSE COMPLETION | The course is only deemed as complete when participants have met ALL of the following conditions: - Passed e-learning/pre-learning component AND - Attended the live session AND - Submitted course evaluations for the e-learning and the live session component | |
| TARGET AUDIENCE | Senior trainees and trained surgeons, who are planning a career in spine surgery. | |
| IMPORTANT (!) | Completion of e-learning component is mandatory Attendance of the live session is mandatory | |



E-learning Programme

(available from May 2025)

| Time/Duration | Topic | Faculty | |
|----------------|--|---------|--|
| | | | |
| 0:15 | Basic concepts in spinal endoscopy | Debono | |
| Interlaminar | | | |
| 00:20 | Interlaminar endoscopic lumbar discectomy (IELD) | Baranto | |
| 00:20 | Lumbar endoscopic unilateral laminotomy for bilateral decompression (LE-ULBD, "over the top" decompression) | Siepe | |
| 00:20 | Knowledge check questions | | |
| Transforaminal | | | |
| 00:20 | Transforaminal endoscopic lumbar discectomy (TELD) | Hassel | |
| 00:20 | Transforaminal endoscopic lumbar foraminotomy (TELF) | Wagner | |
| Biportal | | | |
| 00:20 | Unilateral biportal endoscopy (UBE) | Lonjon | |
| 00:20 | Knowledge check questions | | |



Live Session Programme

26 June 2025

IRCAD Lab (Skills Lab) and Hirsch Lecture Theatre (Lecture and cases) 08:00 – 18:15 CEST

Skills Lab

- Learners
 - o 6 groups
 - o 4 learners per group
- Rotations
 - o 3 rotations
 - o 6 stations in total (2 each technique)
 - o 90 minutes per rotation
- Techniques
 - 1. Interlaminar endoscopic techniques: Siepe and Baranto
 - 2. Transforaminal endoscopic techniques: Remacle and Wagner
 - 3. Unilateral biportal endoscopic technique: Debono and Cristini

| 08:00 - 09:30 | Rotation 1 | |
|--------------------|--|--|
| 09:30 – 09:45 | Coffee Break | |
| 09:45 – 11:15 | Rotation 2 | |
| 11:15 – 11:30 | Coffee Break | |
| 11:30 – 13:00 | Rotation 3 | |
| 13:00 – 14:00 | Lunch | |
| Lectures and Cases | | |
| 14:00 – 15:45 | Cases 1 Interlaminar – Baranto, Remacle, Hassel | |
| 15:45 – 16:00 | Coffee Break | |
| 16:00 – 17:45 | Cases 2 Transforaminal / UBE – Wagner, Cristini, Debono | |
| 17:45 – 18:15 | Complications prevention and management in endoscopic spine surgery - Hassel | |
| 18:15 | END OF COURSE | |



Learning Outcomes

Endoscopy in Lumbar Spine

- Explain how to use the endoscope in the spine
- Describe the relevant anatomy for lumbar endoscopy
- List and evaluate the different approaches to the lumbar spine

Interlaminar Endoscopic Techniques

- Describe the interlaminar endoscopic technique (theatre set-up, patient positioning, planning, procedural steps, limitations)
- Describe interlaminar endoscopic lumbar discectomy (IELD)
- Describe lumbar endoscopic unilateral laminotomy for bilateral decompression (LE-ULBD, "over the top" decompression)

Transforaminal Endoscopic Techniques

- Describe the transforaminal endoscopic technique (theatre set-up, patient positioning, planning, procedural steps, limitations)
- Describe transforaminal endoscopic lumbar discectomy (TELD)
- Describe transforaminal endoscopic lumbar foraminotomy (TELF)

Unilateral Biportal Endoscopic Technique

• Describe the unilateral biportal endoscopic technique (theatre set-up, patient positioning, planning, procedural steps, limitations).

General

- Identify the ideal indications for novice surgeons and recognise
- The contraindications based on the evidence
- Describe the pitfalls of the different procedures and discuss how to
- Prevent and manage complications

Assessment

To complete this course, participants must complete and pass the e-learning quizzes with a minimum score of 70% and complete the required course evaluations, which include a reflective component.



Recommended Reading

AOSpine Consensus Paper on Nomenclature for Working-Channel Endoscopic Spinal Procedures, Global Spine Journal. 2020 Apr; 10(2 Suppl): 1115–121S. DOI: 10.1177/2192568219887364

Endoscopic Spine Surgery (J Korean Neurosurg Soc 60 (5): 485-497, 2017) DOI: 10.3340/jkns.2017.0203.004

Endoscopic Disc and Decompression Surgery (Book chapter) Rütten, Hahn (AOSpine MISS)

Comparative Study Between Uniportal Full-Endoscopic Interlaminar and Tubular Approach in the Treatment of Lumbar Spinal Stenosis: A Pilot Study Global Spine Journal 2020, Vol. 10(2S) 70S-78S

TELF: Percutaneous Endoscopic Lumbar Foraminotomy: An Advanced Surgical Technique and Clinical Outcomes Neurosurgery, 2014, 75:124 133 DOI: 10.1227/NEU.000000000000361

TE-LRD: Percutaneous Transforaminal Endoscopic Decompression on Lateral Recess Stenosis: Technical Notes and Outcomes of Two Years Follow-up. A Case Series Study International Journal of Clinical and Experimental Medicine, 2018; 11(10):10731-10739 URL: www.ijcem.com/IJCEM0077613 / ISSN: 1940-5901

Complications of Percutaneous Endoscopic Lumbar Discectomy: Experiences and Literature Review Zhu et al., J Spine 2017, 6:6 DOI: 10.4172/2165 7939.1000402

Unique Complications of Percutaneous Endoscopic Lumbar Discectomy and Percutaneous Endoscopic Interlaminar Discectomy Pain Physician 2018; 21: E105-E112 • ISSN 2150-1149#

Complications and Limitations of Endoscopic Spine Surgery and Percutaneous Instrumentation Kim HS, Sharma SB, Wu PH, Raorane HD, Adsul NM, Singh R, et al. Indian Spine Journal 2020; 3:78-85

New Era of Percutaneous Endoscopic Lumbar Surgery: Lumbar Stenosis Decompression – A Technical Report Choi et al., J Spine 2014, 3:5 DOI: 10.4172/2165 7939.1000182

Clinical Outcomes and Complications after Biportal Endoscopic Spine Surgery: A Comprehensive Systematic Review and Meta-analysis of 3673 Cases Don Y. Park, Alexander Upfill-Brown, Nora Curtin, Christopher D. Hamad, Akash Shah, Brian Kwon, Yong H. Kim, Dong Hwa Heo, Cheol Woong Park, William L. Sheppard DOI: 10.1007/s00586-023-07701-9