Dear Spine Surgeon,

With our training program, we enable surgeons to gain a comprehensive overview of the possibilities of the full-endoscopic technique and to learn this step by step. Our course modules and services guarantee a fast and safe learning success which can be applied depending upon previous knowledge directly in the clinical practice. An essential feature of our training concept is the individual hands-on training in small groups. Interested surgeons can very quickly gain and deepen their first practical experience and are thus very well prepared for implementation in the OR.

Your needs and wishes are important to us, contact us directly for an individual consultation.
Dear Colleagues,

The therapy of degenerative diseases of the spine carries with it medical and socioeconomic problems. After conservative measures are exhausted and where there are exacerbated pain conditions or neurological deficits, a surgical procedure may become necessary. Despite good therapy results, consecutive damage may occur due to traumatisation. It is therefore of particular importance to optimise these procedures on a continuous basis. The goal we should strive for is the minimization of surgically induced traumatisation and negative long-term consequences, taking into account the existing quality standard. Minimally invasive techniques can reduce tissue damage and its consequences. Endoscopic surgeries demonstrate advantages which have raised these procedures to the standard in various medical areas.

During the training course we intend, in a reciprocal exchange with you, to try to demonstrate the current and future options as well as problems, risks and complications of full-endoscopic surgeries in the area of the spine. In an environment of practical demonstration where you perform access routines on cadavers yourself, typical practical experience for your expected learning curve or future clinical application can be gathered. Under intensive tuition by instructors, each participant will perform the various access routines on a practical level and run through special working procedures. For this reason the number of participants is limited.

Nevertheless, the training course cannot replace the acquisition of the necessary extensive knowledge.

S. Ruetten        M. Komp
RIWOspine Challenges
Target guided Education & Training

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Requirements

1. Knowledge
   - Study of literature & publications
   - Joining full-endoscopic sessions and symposia

2. Experience
   - Case observations & Fellowships with experienced surgeons

3. Skills
   - Intensive training on cadavers:
     - Needle placement
     - Endoscopic orientation
     - Instrument handling

Target

1st endoscopic Case

Organization Office:
RIWOspine GmbH
Ms. Julia Armingeon
Tel.: +49 7043 35-4137
education@riwospine.com
www.riwospine.com/events
RIWOspine Education Program
Training Concept on Full-endoscopic Spine Surgery

Your needs are important to us!
We will support you with our RIWOspine Education Program in order to implement these innovative techniques in your hospital and to manage the learning curve successfully.

RIWOspine Education Program is a comprehensive training concept consisting of different modules for you as a user. Over recent years, the program has been gradually optimized by incorporating experiences from practical application. It allows surgeons to use the system safely and successfully.

The development of standardized procedures now enables us to guarantee you a uniform level of quality across the world.

Contact us now for your individual training!

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International Symposium
Full-endoscopic Surgery of the Lumbar, Thoracic and Cervical Spine

One Day Symposium with Live Surgeries

- **Lumbar spine:**
  Trans-/extraradicular and interlaminar full-endoscopic approach for spine decompression.
  **Indications:**
  - Disc herniation
  - Spinal canal stenosis
  - Epidural cysts

- **Thoracic spine:**
  Surgery of thoracic disc herniations and stenosis in full-endoscopic techniques.

- **Cervical spine:**
  Full-endoscopic surgery of the cervical spine with anterior and posterior approach.

You are interested in full-endoscopic spine surgery?

Join one of our symposia to learn more about this most minimal invasive technique, the full concept of this surgery, scientific background and the individual RIWOspine education program. Live surgeries give you an impression of all possibilities in full-endoscopic spine techniques.

**Dates and Locations:**
- **31st January**
  Bangkok, Thailand
- **20th March**
  Gothenburg, Sweden
- **27th March**
  Herne/Düsseldorf, Germany
- **19th June**
  Vernon Hills, IL, USA
- **18th September**
  Herne/Düsseldorf, Germany
Basic Training Course
Full-endoscopic Surgery of the Lumbar Spine

One Day Lectures and Live Surgeries
Lectures are held by international surgeons with long-term experience in full-endoscopic spine surgery. Live surgeries either transmitted from the OR to the meeting room or watched in the OR directly.

One Day Cadaver Training
- Practical exercises for participants on cadaver and training models
- Live demonstrations of full-endoscopic lumbar surgeries
- Extraforaminal / Transforaminal / Interlaminar Approach

International experienced instructors teach participants in comprehensive hands-on trainings.

Course Target
The aim of this course is to get to know the scientific background and the possibilities in full-endoscopic spine surgery, to learn principles and techniques and to make initial practical experiences with the full-endoscopic technique on the lumbar spine in hands-on training. After the course, you will know the standardized endoscopic approaches to the lumbar spine and indication criteria.
Intensive Training Course
Full-endoscopic Surgery of the Lumbar Spine

One Day Lectures and Live Surgeries
Lectures are held by international surgeons with long-term experience in full-endoscopic spine surgery. Live surgeries could be either clinical consultation or transmitted live from the OR to the meeting room.

One Day Cadaver Training
- Practical exercises for participants on cadaver and training models
- Live demonstrations of full-endoscopic lumbar surgeries
- Extraforaminal / Transforaminal / Interlaminar Approach

International experienced instructors teach participants in comprehensive hands-on trainings.

Course Target
The aim of this course is to enable surgeons to start with full-endoscopic spine surgery in their hospitals. After the course you will be able to perform simple clinical cases, supported by our clinical specialists or instructors.

30th + 31st January
Bangkok, Thailand

14th February
Madrid, Spain

18th + 19th February
Munich, Germany

26th + 27th March
Herne/Düsseldorf, Germany

30th + 31st March
Herne/Düsseldorf, Germany

11th + 12th May
Gent, Belgium

12th + 13th May
Gent, Belgium

20th June
Vernon Hills, IL, USA

17th + 18th September
Herne/Düsseldorf, Germany

21st + 22nd September
Herne/Düsseldorf, Germany

13th + 14th October
Munich, Germany

www.riwospine.com
Course Target
In this course, experienced spine surgeons have the opportunity to expand their already existing knowledge and skills in full-endoscopic techniques and to learn the use of special instruments. Participants in this course should already have performed full-endoscopic surgery on several cases. Optionally, this course also allows you to train techniques on the cervical spine.

One Day Lectures and Live Surgeries
Lectures are held by international surgeons with long-term experience in full-endoscopic spine surgery. Live surgeries could be either clinical consultation or transmitted live from the OR to the meeting room.

One Day Cadaver Training
- Practical exercises for participants on cadaver and training models
- Live demonstrations of full-endoscopic lumbar surgeries
- Extraradicular / Transtural / Interlaminar Approach

International experienced instructors teach participants in comprehensive hands-on trainings.

31st March + 01st April
Hemne/Düsseldorf, Germany
17th + 18th July
Seoul, Korea
22nd + 23rd September
Hemne/Düsseldorf, Germany
One Day Intensive Course

- Scientific lecture
- Practical skills training on cadaver
- Percutaneous facet and sacroiliac joint denervation
- Percutaneous nucleoplasty
- Endoscopic facet and sacroiliac joint denervation

Course Target

Facet and sacroiliac joint denervation and nucleoplasty are important minimal-invasive techniques for treatment of low back pain. In this course you will learn all about the principles and techniques performed with 4MHz radiofrequency technologies PERCULINE and VERTEBRIS denervation system. After the course you will be able to perform those techniques in clinical cases.
RIWOspine Alliance
Our professional network for spine surgeons worldwide

A strong partnership
RIWOspine Alliance connects innovative spine surgeons worldwide, facilitating cooperation and exchange of expertise in full-endoscopic surgery. A network of partners enables minimally invasive surgical techniques and methods to be established and developed. The combined experience of many people collaborating together helps each surgeon to solve individual medical cases and challenges. RIWOspine Alliance is the professional platform combining knowledge and experience. It is an enabler for collaborative advances in spine surgery.

RIWOspine Alliance – Education Program
Within this alliance network we offer excellent possibilities to all members to improve their knowledge of full-endoscopic techniques in spine surgery. All registered members of the RIWOspine Alliance get free access to all events – Special Case, Live Webcast, Live OR-cast. Join the RIWOspine Alliance Forum for registration and detailed information.

The Communication platform
Do you have any questions about indications, special cases, or would you like to access another expert opinion?

Live online case presentation: The special Case
Experts report on their experiences in full-endoscopic operations and highlight options and limitations.

Live online Webcast
Special presentations about topics in full-endoscopic surgery presented by experienced surgeons.

Live online ORcast
You are connected live with the operating room of one of our reference centers.

www.forum.riwospine.com
Clinical Consultations
St. Anna Hospital, Herne / Germany
Appointment on request
Schön Clinic, Munich / Germany
Appointment on request
Vivantes Humboldt Clinic, Berlin / Germany
Appointment on request
Bumrungrad Intern. Hosp., Bangkok / Thailand
Appointment on request

Fellowships
Appointment on request

Congress
NASS - ETSS, 19th – 22nd February
Park City, USA
AANS/CNS Spine Section, 05th – 08th March
Las Vegas, USA
ISMISS, 02nd – 03rd April
Istanbul, Turkey
ASIPP, 02nd – 04th April
Dallas, USA
AANS, 26th – 28th April
Boston, USA
Spine Week Melbourne, 27th April – 01st May
Melbourne, Australia
Global Spine Congress, 20th – 23rd May
Rio de Janeiro, Brazil
ASEAN MISST, 24th – 26th June
Yogyakarta, Indonesia
CNS, 14th – 16th September
Miami, USA
WCMISST, 22nd – 25th September
Kobe, Japan
Eurospine Vienna, 07th – 09th October
Vienna, Austria
NASS, 07th – 09th October
San Diego, USA
**RIWOspine USA**
National training program

**RIWOspine Japan**
National training program

### RIWOspine USA

**Basic Training Course**
Vernon Hills, IL:
- 18th January
- 18th April
- 16th May
- 08th August
- 24th October
- 09th December
Las Vegas:
- 22nd February

**Intensive Training Course**
Vernon Hills, IL:
- 25th January
- 28th March
- 30th May
- 20th June
- 26th September
- 07th November

**Pain Therapie Training Course**
Vernon Hills, IL:
- 19th April
- 26th July

### RIWOspine Japan

**09th February**
The 24th PED Seminar Workshop (WET course)
Tokyo Science Center

**15th February**
Midami Tohoku - Shin Yurigaoka Neuro Spine
Winter Seminar
Shin Yurigaoka General Hospital

**16th - 18th April**
The 49th Annual Meeting of the Japanese Society for Spine Surgery and Related Research
Nagoya International Conference Center

**TBD May**
Japanese Society for Neuroendoscopy Workshop
Pacifico Yokohama

**18th - 20th June**
The 35th Annual Meeting of the Neurospinal Society of Japan
The 11th Annual Meeting of Asia Spine
Pacifico Yokohama

**19th June**
The 11th Wakanoura Seminar for the Study of Minimally Invasive Spine Surgery
Wakayama Medical University

**03rd + 04th July**
The 10th Annual Meeting of the Society for minimally-invasive and endoscopic techniques of spinal neurosurgery
JR Hakata City Hotel

**24th - 26th September**
MIS SPINE WEEK 2020
Kobe International Conference Center

**04th November**
Japanese Society for Neuroendoscopy Workshop (DRY course)
Wakayama

**05th + 06th November**
The 27th Annual Meeting of the Japanese Society for Neuroendoscopy
Wakayama

**TBD November**
JOA Endoscopic Spine Surgery Workshop (WET course)
MEDEC (Kobe)