EDUCATION EURO SPINE

EduWeek 2025

5

Tumours and Infammatory Diseases of the Spine



### **General Information**

#### **EUROSPINE**, the Spine Society of Europe

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#### **Chair of Education Committee**

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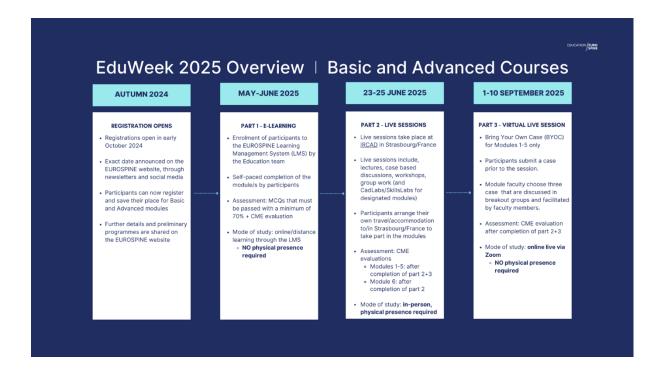
#### **Module Chairs**

Jeremy Reynolds, United Kingdom Ralph de Boer, Netherlands

#### **Module Faculty**

Charlie Bouthors, France Florian Gessler, Germany Cordula Netzer, Switzerland Enrico Tessitore\*, Italy

\*e-learning faculty





# **Quick Facts**

	Live session
	Group 1: 23 June 2025 (13:00-17:15 CEST)
	Group 2: 24 June 2025 (08:00-12:15 CEST)
DATES & TIMES	Group 2. 24 June 2025 (08.00-12.15 CL51)
	Virtual live session
	Group 1 and 2: 08 September 2025 (18:00-19:30 CEST)
LIVE SESSION	
VENUE	IRCAD, 1 Place de l'Hôpital, 67000 Strasbourg, FRANCE
MAX. ATTENDEES	40 delegates (per group)
	EUROSPINE Member: €800
REGISTRATON FEES	Non-member: €1,000
	The EUROSPINE Basic and Advanced Spine Surgery eLearning platform made
	available on <a href="https://eurospine.matrixlms.eu">https://eurospine.matrixlms.eu</a> and organized by EUROSPINE, the
	Spine Society of Europe is accredited by the European Accreditation Council for
	Continuing Medical Education (EACCME®) to provide the following CME activity for
	medical specialists. The e-learning activity for this module is accredited with 5 CME credits.
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	Only those e-learning materials that are displayed on the UEMS-EACCME® website
	have formally been accredited. Through an agreement between the Union
	Européenne des Médecins Spécialistes and the American Medical Association,
	physicians may convert EACCME® credits to an equivalent number of AMA PRA
	Category 1 CreditsTM. Information on the process to convert EACCME® credit to AMA credit can be found at <a href="https://edhub.ama-assn.org/pages/applications">https://edhub.ama-assn.org/pages/applications</a> .
	AiviA credit can be round at https://eunub.ama-assn.org/pages/applications.
	"The EduWeek 2025: Module 5: Tumours and Inflammatory Diseases of the Spine -
	Cohort 1, Strasbourg, France 23/06/2025 - 08/09/2025, has been accredited by the
	European Accreditation Council for Continuing Medical Education (EACCME®) with
CNAE CREDITS	5.0 European CME credits (ECMEC®s). Each medical specialist should claim only
CME CREDITS	those hours of credit that he/she actually spent in the educational activity."
	"The EduWeek 2025: Module 5: Tumours and Inflammatory Diseases of the Spine -
	Cohort 2, Strasbourg, France 24/06/2025 - 08/09/2025, has been accredited by the
	European Accreditation Council for Continuing Medical Education (EACCME®) with
	5.0 European CME credits (ECMEC®s). Each medical specialist should claim only
	those hours of credit that he/she actually spent in the educational activity."
	"Through an agreement between the Union Européenne des Médecins Spécialistes
	and the American Medical Association, physicians may convert EACCME® credits to
	an equivalent number of AMA PRA Category 1 CreditsTM. Information on the
	process to convert EACCME® credit to AMA credit can be found at
	https://edhub.ama-assn.org/pages/applications .
	"Live educational activities, occurring outside of Canada, recognised by the UEMS-
	EACCME® for ECMEC®s 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."



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.  In preparation for the live session, the mandatory self-paced e-learning component will be available from May 2024 on the EUROSPINE Learning Management System (LMS). This component must be completed before the live session.
MODULE COMPLETION	A module is only deemed as complete when participants have met ALL of the following conditions:  Passed the e-learning with at least 70% AND  Attended the live session AND  Attended the virtual BYOC live session AND  Submitted the course evaluations for the e-learning and the (virtual) live session component
TARGET AUDIENCE	Senior trainees and trained surgeons, who are planning a career in spine surgery.
IMPORTANT (!)	<ul> <li>Completion of e-learning module is mandatory</li> <li>Attendance of the live session and virtual live session is mandatory</li> <li>Group 1 and 2 contain the same content. Participants are registered for ONE of the groups only!</li> <li>Changing groups once registered is NOT possible!</li> </ul>

# **PART 1 - E-learning Programme**

(available from May 2025)

Time Duration	Торіс	Faculty	
	Vertebral Osteomyelitis		
00:27	Primary spinal infections	Netzer	
00:09	Conservative treatment	Bouthors	
00:06	Vertebral osteomyelitis: Indications for surgical decompression and instrumentation	De Boer	
00:20	Knowledge check questions		
Metabolic Bone Disease			
00:12	Bone disorders	Tessitore	
00:13	Osteoporosis (aetiology, diagnosis, drug therapy)	De Boer	
00:17	Surgical considerations in disorders of the bone	Reynolds	



00:20	Knowledge check questions		
Rheumatoid Arthritis (RA) And Ankylosing Spondylitis (AS)			
00:10	Rheumatoid arthritis	De Boer	
00:15	Aetiology, pathogenesis, symptoms, diagnosis of AS	Gessler	
00:22	Stabilizing and corrective surgery of the TL spine in AS	Gessler	
00:30	Diagnosis and treatment of the occipito-atlantoaxial Gessler complex in RA		
00:20	00:20 Knowledge check questions		
Tumours of the Axial Skeleton			
00:20	Benign tumours of the spine	Netzer	
00:21	Primary tumours of the spine	Reynolds	
00:35	Secondary malignant tumours diagnosis and management	Netzer	
00:09	Complications and quality of life evaluation	Tessitore	
00:20	Knowledge check questions		

# **PART 2 - Live Session Programme**

Group 1 – IRCAD Room Hirsch 23 June 2025		
13:00–15:10	Cases	
15:10 –15:25	Coffee break	
15:25 –17:15	Cases	
17:15	End Group 1	

Group 2 - IRCAD Room Hirsch 24 June 2025		
08:00 -10:10	Cases	
10:10 -10:25	Coffee break	
10:25 –12:15	Cases	
12:15	End Group 2	

Case Based Discussions			
Topic List Group 1 and 2	Case presenter	Moderator	Expert opinion
Introduction		De Boer & Reynolds	
Vertebral osteomyelitis	Bouthors	Netzer	De Boer
Osteopenia	Gessler	Bouthors	Netzer
Rheumatoid arthritis	Netzer	Gessler	Bouthors
Osteosarcoma	Reynolds	De Boer	Reynolds



Transoral surgery	De Boer	Reynolds	Gessler
END OF LIVE SESSION			

### **PART 3 - Virtual Live Session**

### Bring Your Own Case (BYOC)

08 September 2025 18:00 – 19:30 CEST		
18:00-18:05	Introduction	
18:05-18:25	Breakout session 1	
18:25-18:30	Discussion 1	
18:30-18:50	Breakout session 2	
18:50-18:55	Discussion 2	
18:55-19:00	Break	
19:00-19:20	Breakout 3	
19:20-19:25	Discussion 3	
19:25-19:30	Wrap-up and conclusion	
END OF MODULE		

## **Learning Outcomes**

### **Vertebral Osteomyelitis**

#### Aetiology, Pathogenesis, Routes of Spread

- Explain the aetiology of vertebral osteomyelitis, including bacterial, tuberculous, and fungal.
- Describe the pathogenesis, including venous route, arterial inoculation, and iatrogenic direct extension.
- Anticipate the routes of spread: vertebral body & intervertebral disc.

#### Symptoms & Diagnosis

- Recognise the signs and symptoms of vertebral osteomyelitis
- Identify the risk factors (immunodeficiency, etc)
- Select appropriate investigations
- Distinguish between Magnetic Resonance Imaging (MRI) and X-ray, the key features that define and contrast both pyogenic and tuberculous spinal lesions.

#### Conservative Management & Indications for Surgical Treatment

- Evaluate options for conservative treatment
- Compare absolute and relative indications for conservative treatment

#### **Metabolic Bone Diseases**

#### **Bone Disorders**

- Paget's disease
- Rickets
- Diffuse idiopathic skeletal hyperostosis (DISH) (Forestier's disease)
- Metabolic bone disease



#### Osteoporosis

- Outline the aetiology of osteoporosis
- Diagnose osteoporosis using appropriate investigations

#### Surgical Considerations in Disorders of the Bone

- Evaluate treatment options
- Compare minimally invasive techniques, including;
  - vertebroplasty
  - kyphoplasty
  - vertebral body stenting

### Rheumatoid Arthritis and Ankylosing Spondylitis

#### Aetiology, Pathogenesis, Symptoms, Diagnosis

- Explain the aetiology of rheumatoid disease
- Describe the pathogenesis relating to rheumatoid disease and joint changes
- Recognise the signs and symptoms
- Select and interpret appropriate investigations and imaging
- Recognise the signs of
  - o The rheumatoid spine
  - ankylosing spondylitis

#### Stabilising & Corrective Surgery of the Spine

- Describe indications for corrective surgery for ankylosing spondylitis
- Diagnose the occipito-atlantoaxial complex and the subaxial cervical spine
- Differentiate between horizontal and vertical atlantoaxial instability

#### Diagnosis & Treatment of the Occipito-Atlantoaxial Complex

- Identify the commonly used radiographic lines and measurements for the CO to C2 complex.
- Plan appropriate treatment for C0 to C2 and sub-axial rheumatic neck problems.
- Appraise current evidence regarding outcome and prognosis.

#### Tumours of the Axial Skeleton

#### Primary Benign Tumours and Tumour-Like Lesions: Diagnosis and Management

- Explain the aetiology of tumours and tumour-like lesions
- Describe the pathogenesis relating to tumours and tumour-like lesions
- Differentiate between primary benign tumours and tumour-like lesions
- Select appropriate investigations, interpret results, and stage tumour-like lesions
- Evaluate treatment options
- Anticipate outcomes
- Formulate a plan for long-term monitoring

#### Secondary Malignant Tumours: Diagnosis and Management

- Justify the relative importance of combined tumour therapy, including surgery, radiotherapy, and chemotherapy.
- Evaluate surgical options and results
- Formulate a multidisciplinary management plan



- Justify the risks, benefits and impact of radiotherapy and chemotherapy
- Evaluate surgical options
- Anticipate complications

## **Learning Outcomes – Bring Your Own Case (BYOC)**

The module concludes with a virtual live session of Bring Your Own Case (BYOC). BYOC is a case-based learning session based on the participants' own practice or experience. Before the virtual live session, participants will be asked to submit a case on the module topic.

The cases are ideally the participants' own and should preferably present questions with no single right answer or dilemmas. The cases could also be from their own departments, and ideally, the participant should have had some personal connection or at least seen the case.

The cases will be shared with assigned faculty preceptors who will process the cases and determine the line-up and order of discussion. Some cases may be grouped with those of other colleagues in discussion.

At the end of the session, participants will be able to:

- Synthesise background knowledge and principles on the topic (module name) and apply them to their own case and other cases presented
- Identify dilemmas and issues with their case and other cases presented
- Raise points and questions on their case and other cases presented
- Defend their positions regarding their case and the cases presented during the discussion
- Recognise and understand diverse perspectives from other participants and faculty
- Assimilate new ideas, new techniques and information, and adopt them appropriately in practice
- Formulate clinical decisions, strategies and generate possible solutions for their case and other cases presented

### **Recommended Reading**

Part V Basic Module 5: Tumours of Spine and Inflammatory Diseases. B. Meyer and M. Rauschmann (Eds.), Spine Surgery: A Case-Based Approach. Switzerland: Springer.

- C. Fleege and M. Rauschmann. (2019). Vertebral Osteomyelitis: Aetiology, Pathogenesis, Routes of Spread, Symptoms and Diagnosis. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 327-338). Switzerland: Springer.
- A. Slavici. (2019). Pyogenic Infection Following Single-Level Nucleotomy. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 339-344). Switzerland: Springer.
- G. Prezerakos and A.T.H. Casey. (2019). Diagnostics and Treatment of C1/C2 Instability in Rheumatoid Arthritis. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 345-352). Switzerland: Springer.
- G.Prezerakos and A.T.H. Casey. (2019). Treatment Options in Severe Cervico-Thoracal Deformity in "Bechterew's Disease". B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 353-362). Switzerland: Springer.



- M. Richter. (2019). Diagnosis and Treatment of the Occipito-Atlantoaxial Complex and Subaxial Cervical Spine in Rheumatoid Diseases. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 363-368). Switzerland: Springer.
- H. Pape and Y. Ryang. (2019). Osteoporosis (Aetiology, Diagnosis, Drug Therapy, Surgical Therapy). B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 369-376). Switzerland: Springer.
- H. Pape and Y. Ryang. (2019). Benign Tumours and Tumour-Like Lesions. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 377-384). Switzerland: Springer.
- M. Rickert and M. Rauschmann. (2019). Primary Malignant Tumours. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 385-400). Switzerland: Springer.
- J. Gempt. (2019). Secondary Malignant Tumours (Diagnosis, Staging, Surgical Treatment and Adjuvant Therapy). B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 401-409). Switzerland: Springer