MODULE 5
TUMOURS & INFLAMMATORY DISEASES OF THE SPINE
2-3 July 2020
PRELIMINARY PROGRAMME
QUICK FACTS

WHEN: 2-3 July 2020
WHERE: IRCAD
Hôpitaux Universitaires
1, place de l’Hôpital
67091 Strasbourg, France
www.ircad.fr
+ 33 (0)3 88 11 90 00

MAXIMUM ATTENDEES: 40 delegates
REGISTRATION FEE: EUROSPINE Member: €800
Non-member: €1000
CME CREDITS: Accreditation by EACCME® (European Accreditation Council for Continuing Medical Education) pending
LANGUAGE: English
DRESS: Casual
IMPORTANT NOTE: Attendance at every session is mandatory. This will be a paperless course and not printed programme will be provided. A wireless Internet device (mobile phone/ipad/computer) will be necessary to access on-line resources during the course and for completing the course evaluation. Please bring one with you. The course evaluation is mandatory to obtain the CME certificate.

TARGET AUDIENCE
Senior trainees and trained surgeons, who are planning a career in spinal surgery.

LEARNING OUTCOMES: SESSION 1 - VERTEBRAL OSTEOMYELITIS

Etiology, 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 osteolyelitis
- Identify the risk factors (immunodeficiency etc)
- Select appropriate investigations
• Distinguish on 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

Surgical Management of Spinal Infections
• Formulate a plan for infection specific treatment
• Anticipate complications
• Plan appropriate management
• Appraise current evidence concerned with spondylitis outcome and prognosis

Case Discussion

LEARNING OUTCOMES: SESSION 2 - METABOLIC BONE DISEASES

Bone Disorders
• Paget's disease
• Rickets
• DISH (Forestier’s disease)
• Metabolic bone disease

Osteoporosis
• Outline the etiology of osteoporosis
• Diagnose osteoporosis using appropriate investigations

Surgical Considerations In Disorders of the Bone
• Evaluate treatment options
• Compare minimally invasive techniques including:
  o vertebroplasty,
  o kyphoplasty
  o vertebral body stenting

Case Discussion
LEARNING OUTCOMES: SESSION 3 - CADAVER LABS

Posterior Cervical
- Approach the posterior cervical spine
- Identify anatomical landmarks of the occipito-cervical region
- Anticipate risks and pitfalls
- Perform lateral mass screw fixation
- Perform lamina hook fixation
- Perform C1-C2 screw osteosynthesis (Harms or Magerl)
- Insert an occipital plate

VBR: Vertebral Body Replacement (Thoracic Spine & Thoraco-Lumbar Junction)
- Approach to the anterior thoracic and thoraco-lumbar spine
- Describe the relationship between large vessels and spine
- Elevate diaphragm
- Prepare rib for strut graft
- Perform discectomy
- Perform corpectomy
- Place rib strut graft
- Place corpectomy cage

LEARNING OUTCOMES: SESSION 4 - RHEUMATOID ARTHRITIS AND ANKYLosing Spondylitis

Etiology, Pathogenesis, Symptoms, Diagnosis
- Explain the aetiology of rheumatoid disease
- Describe the pathogenesis relating rheumatoid disease and joint changes
- Recognise the signs and symptoms
- Select and interpret appropriate investigations and imaging
- Recognise signs of
  - the rheumatoid spine
  - ankylosing spondylitis

Stabilizing & Corrective Surgery of the Spine
- Describe indications for corrective surgery for ankylosing spondylitis
- Diagnose occipito-atlantoaxial complex and 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 C0 to C2 complex.
- Plan appropriate treatment for C0 to C2 and sub-axial rheumatic neck problems.
- Appraise current evidence regarding outcome and prognosis

Case Discussion
LEARNING OUTCOMES: SESSION 5 - 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

Case Discussion
COURSE CHAIRS:

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>CARMEN VLEGGEERT-LANKAMP</td>
<td>LEIDEN, NETHERLANDS</td>
</tr>
<tr>
<td>ENRICO TESSITORE</td>
<td>GENEVA, SWITZERLAND</td>
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</tbody>
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COURSE FACULTY:

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>Ciaran Bolger</td>
<td>Dublin, Ireland</td>
</tr>
<tr>
<td>Marcel Ivanov</td>
<td>Sheffield, United Kingdom</td>
</tr>
<tr>
<td>Jeremy Reynolds</td>
<td>Oxford, United Kingdom</td>
</tr>
<tr>
<td>Florian Ringel</td>
<td>Mainz, Germany</td>
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## SCIENTIFIC PROGRAMME, MODULE 5
### DAY 1 - THURSDAY, 2 JULY 2020

Venue: IRCAD, Strasbourg, France

**COURSE ATTENDANCE IS MANDATORY**

<table>
<thead>
<tr>
<th>TIME</th>
<th>TOPIC</th>
<th>FACULTY</th>
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<tbody>
<tr>
<td>07:30-08:00</td>
<td>Participants’ check-in and welcome</td>
<td></td>
</tr>
<tr>
<td>08:00-08:10</td>
<td>Introduction</td>
<td>Carmen Vleggeert-Lankamp</td>
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### SESSION 1: Vertebral Osteomyelitis

<table>
<thead>
<tr>
<th>TIME</th>
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<tbody>
<tr>
<td>08:10-08:30</td>
<td>Etiology, Pathogenesis, symptoms and diagnosis</td>
<td>Marcel Ivanov</td>
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<tr>
<td>08:30-08:50</td>
<td>Conservative treatment</td>
<td>Enrico Tessitore</td>
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<tr>
<td>08:50-09:10</td>
<td>Indications for Surgical decompression and instrumentation</td>
<td>Florian Ringel</td>
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<tr>
<td>09:10-10:00</td>
<td>Case discussion on vertebral osteomyelitis</td>
<td>Moderator: Carmen Vleggeert-Lankamp</td>
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<td>Case: Florian Ringel</td>
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Coffee Break 30 min

### SESSION 2: Metabolic Bone disease

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<tr>
<th>TIME</th>
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<tbody>
<tr>
<td>10:30-10:50</td>
<td>Bone disorders</td>
<td>Enrico Tessitore</td>
</tr>
<tr>
<td>10:50-11:10</td>
<td>Osteoporosis (Etiology, Diagnosis, Drug Therapy)</td>
<td>Carmen Vleggeert-Lankamp</td>
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<tr>
<td>11:10-11:30</td>
<td>Surgical Considerations in Disorders of the Bone</td>
<td>Jeremy Reynolds</td>
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<tr>
<td>11:30-12:10</td>
<td>Case on metabolic bone disorder</td>
<td>Moderator: Marcel Ivanov</td>
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<td></td>
<td></td>
<td>Case: Jeremy Reynolds</td>
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<tr>
<td>12:10-12:50</td>
<td>Cadaver Lab Discussion</td>
<td>All Faculty</td>
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Lunch 50 min

### SESSION 3: Cadaver Labs

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<tr>
<th>TIME</th>
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<tbody>
<tr>
<td>13:40-14:00</td>
<td>Change in scrubs and go to CadLab</td>
<td>All Faculty</td>
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<tr>
<td>14:00-15:45</td>
<td>Group A Posterior Cervical</td>
<td>All Faculty</td>
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<tr>
<td>14:00-15:45</td>
<td>Group B VBR</td>
<td>All Faculty</td>
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Coffee Break 30 min

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<tr>
<th>TIME</th>
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<th>FACULTY</th>
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<tbody>
<tr>
<td>16:15-18:00</td>
<td>Group B Posterior Cervical</td>
<td>All Faculty</td>
</tr>
<tr>
<td>16:15-18:00</td>
<td>Group A VBR</td>
<td>All Faculty</td>
</tr>
</tbody>
</table>

End of Day 1
### SCIENTIFIC PROGRAMME, MODULE 5
### DAY 2 - FRIDAY, 3 JULY 2020

Venue: IRCAD, Strasbourg, France

**COURSE ATTENDANCE IS MANDATORY**

<table>
<thead>
<tr>
<th>TIME</th>
<th>TOPIC</th>
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<tbody>
<tr>
<td>08:45-09:00</td>
<td>Participants’ check-in and welcome</td>
<td></td>
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<tr>
<td><strong>SESSION 4: Rheumatoid Arthritis and Ankylosing Spondylitis</strong></td>
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<tr>
<td>09:00-09:30</td>
<td>Etiology, Pathogenesis, Symptoms, Diagnosis of RA</td>
<td>Carmen Vleggeert-Lankamp</td>
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<tr>
<td>09:30-10:00</td>
<td>Etiology, Pathogenesis, Symptoms, Diagnosis of AS</td>
<td>Marcel Ivanov</td>
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<td>10:00-10:30</td>
<td>Stabilizing &amp; Corrective Surgery of the TL Spine in AS</td>
<td>Florian Ringel</td>
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<td>Coffee Break 30 min</td>
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<tr>
<td>11:00-11:30</td>
<td>Diagnosis &amp; Treatment of the Occipito-Atlantoaxial Complex in RA</td>
<td>Ciaran Bolger</td>
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<tr>
<td>11:30-12:30</td>
<td>Case discussion on RA</td>
<td>Moderator: Enrico Tessitore</td>
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<td></td>
<td>Lunch 60 min</td>
<td>Ciaran Bolger</td>
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<tr>
<td><strong>SESSION 5: Tumours of The Axial Skeleton</strong></td>
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<tr>
<td>13:30-14:00</td>
<td>Imaging Diagnosis &amp; Staging of Bone Tumours of the Spine</td>
<td>Carmen Vleggeert-Lankamp</td>
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<tr>
<td>14:00-14:30</td>
<td>Primary Malignant Bone Tumours Treatment Options</td>
<td>Jeremy Reynolds</td>
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<tr>
<td>14:30-15:00</td>
<td>Secondary Malignant Bone Tumours Treatment Options</td>
<td>Ciaran Bolger</td>
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<tr>
<td>15:00-15:30</td>
<td>Complications and quality of life evaluation</td>
<td>Enrico Tessitore</td>
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<td>Coffee Break 30 min</td>
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<tr>
<td>16:00-17:00</td>
<td>Case discussion on tumours</td>
<td>Moderator: Jeremy Reynolds</td>
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<td>Case: Ciaran Bolger</td>
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<td>17:00-17:30</td>
<td>Conclusions, diploma and mandatory course evaluation</td>
<td>Carmen Vleggeert-Lankamp</td>
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<tr>
<td>17:30</td>
<td>END OF MODULE</td>
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CONTACTS

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COURSE ORGANISATION

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SCIENTIFIC CONTENT

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Chairman, Education Committee of EUROSPINE