

AO Trauma Europe Masters Course—**Bone Defect and Infection Management (With Human Anatomical Specimens)**

October 17–18, 2024

Lucerne, Switzerland

PROGRAM



Mission

The AO's mission is promoting excellence in patient care and outcomes in trauma and musculoskeletal disorders.

The AO principles of fracture management

1



Fracture reduction and fixation to restore anatomical relationships.

2



Fracture fixation providing absolute or relative stability, as required by the "personality" of the fracture, the patient, and the injury.

3



Preservation of the blood supply to soft-tissues and bone by gentle reduction techniques and careful handling.

4



Early and safe mobilization and rehabilitation of the injured part and the patient as a whole.

Welcome

Dear participant,

Welcome to the AO Trauma Europe Masters Course—Bone Defect and Infection Management (With Human Anatomical Specimens), which is planned and delivered to meet your needs using a competency-based curriculum approach and the AO's seven principles for high-quality education.

AO Trauma's innovative approach to education has been further strengthened as a result of the successful collaboration with the AO Education Institute in the application of state-of-the-art educational concepts in curriculum planning and all faculty development programs.

This course is one of our many educational activities for providing lifelong learning, from the Residents Education Program through to specialized Continuing Professional Development (CPD) for practicing surgeons and clinicians.

We believe that your active engagement in this course will result in improved care for your patients. Your current level of knowledge and skills will be challenged by the activities and throughout the entire event. We are confident that the combination of education principles and relevant content from our curriculum, as well as your interaction with colleagues and expert faculty will provide an effective learning experience that meets your needs.

This course is part of an overall competency-based educational program that includes many other activities and resources for self-directed learning. The educational activities in each program are developed by an international taskforce of clinical experts and educationalists and made available to you through the Education section of www.aotrauma.org.

We hope you enjoy the course and benefit from the networking opportunities it provides for you to share experiences with your colleagues.

Sincerely yours,



Mark Reilly
Chairperson AO Trauma
Education Commission



Wa'el Taha
Chairperson AO Trauma
International Board

If you enjoy the experience during your course and would like to stay in touch with the organization and its international network of surgeons, we invite you to become a member of AO Trauma. The benefits of membership, including options to get involved in new opportunities that advance trauma care are described at www.aotrauma.org.

Goal of the event

Participants will learn the current management of patient with bone defect secondary to either acute bone loss or following debridement of bone due to infection or non-union. Techniques of bone regeneration will be presented with emphasis on bone transport and the induced membrane technique. Moreover, the latest principles governing the diagnosis and treatment of fracture related infection will be covered.

Target participants

Orthopedic and trauma surgeons with at least 3 years of experience who want to develop expertise in bone defect treatment and fracture-related infection management particularly of long bones or surgeons with many years of experience who want to update their knowledge.

Participants should also have completed the AO Trauma Course—Advanced Principles of Fracture Management.

Event description

A combination of evidence-based lectures, case discussions, and dissection and debridement procedures on anatomical specimens will be used to deliver the content, to improve knowledge and skills in the key surgical techniques and in related care. Active engagement by all participants is critical to the effective delivery of this educational event.

Learning objectives

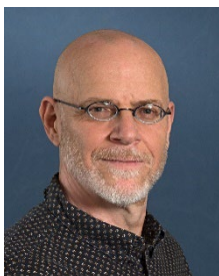
At the end of this course, participants will be able to:

- Describe the risk factors and patient comorbidities predisposing to the development of infection.
- Perform an appropriate assessment of the patient with acute or chronic bone infection.
- Recognize and apply the criteria for the diagnosis of fracture-related infection.
- Appreciate the impact of 'biofilm' in bone infection development.
- Develop a comprehensive plan for eradication of bone infection based on the state of the bone, needs of the patient, the patient factors, and the available surgical options.
- Recognize the importance of multidisciplinary management of patients with infection and bone loss.
- Describe the techniques for bone defect reconstruction and particularly bone transport and Masquelet.
- Identify the advantages and disadvantages of bone loss treatment options and decide which technique would be the best for the patient's specific needs.
- Describe the RIA bone graft harvesting system and the versatility of the RIA cage.

Chairpersons



Ian McFadyen
Stoke-on-Trent, UK



Nir Cohen
Petah Tikva, Israel

Regional faculty

Tom Wright	Southmead Hospital	Bristol, United Kingdom
Radek Bartoska	Hospital Kralovske Vinohrady	Prague, Czech Republic
Nik Kanakaris	General Infirmary	Leeds, United Kingdom
Rihard Trebse	Hospital Valdoltra	Ankaran, Slovenia

National faculty

Mario Morgenstern	University Hospital Basel	Basel, Switzerland
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Educational Advisor

Reto Babst	Kantonsspital Luzern	Luzern, Switzerland
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Thursday

October 17, 2024

08:30-08:50	Participants Registration	
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08:50-09:00	Welcome and introduction	N Cohen, I McFadyen
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Module 1

Moderator: I McFadyen

Bone Infection: General Considerations

09:00-09:20	Plenary case discussion: a mismanaged case	Moderator: I McFadyen
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All Faculty

09:20-09:30	Bone Infection: Etiopathogenesis and risk factors	N Cohen
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09:30-09:45	Definition and classification of fracture-related infection (FRI)	M Morgenstern
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09:45-10:00	Diagnostics in FRI	R Trebse
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Module 2

Moderator: N Cohen

Principles of Management of Acute Infection

10:00-10:20	Case discussion	R Bartoska
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10:20-10:30	The art of irrigation—debridement: How I do it	N Cohen
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10:30-10:45	Soft tissue reconstruction: The role of negative-pressure wound therapy	T Wright
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10:45-11:00	Acute infection strategies	I McFadyen
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11:00-11:15	Coffee break	
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Module 3

Moderator: R Trebse

Principles of Management of Chronic Infection

11:15-11:35	Case discussion	N Cohen
11:35-11:50	Bone debridement: How I do it	R Bartoska
11:50-12:10	Reconstruction ladder for soft tissue management	T Wright
12:10-12:30	Chronic infection treatment strategies	N Kanakaris

Module 4

Moderator: M Morgenstern

Techniques of Bone Loss Reconstruction

12:30-12:45	Bone defect management: An overview of treatment options	M Morgenstern
12:45-13:05	Bone transport: Tips to improve outcomes	I McFadyen
13:05-13:25	Masquelet technique: Tips and tricks	N Cohen
13:25-13:30	Discussion / Q&A	
13:30-14:30	Lunch	

Module 5

Moderator: N Kanakaris

Orthobiologics for Bone Regeneration

14:30-14:45	Bone substitutes	R Bartoska
14:45-15:00	The role of cellular therapies	R Trebse
15:00-15:15	The role of growth factors: Bone morphogenetic proteins—PRP	M Morgenstern
15:15-15:30	The art of composite grafting	N Kanakaris

Module 6

Moderator: R Bartoska

Strategies to Prevent Infection

15:30-15:45	The role of hospital protocols and SOPs	R Bartoska
15:45-16:00	Prescription of antibiotics and the concern of resistance	R Trebse
16:00-16:20	Coated implants: Current insights	N Kanakaris
16:20-16:30	Discussion	
16:30-16:50	Coffee break	

Module 7

Moderator: R Babst

Case Presentation

16:50-18:00	Discussion of 3-4 cases	R Bartoska, R Trebse, N Kanakaris
18:00-18:30	Ask the Expert—Summary and Closure (Bring your case)	
18:30	End of Day 1	

Friday

October 18, 2024

Module 8 Moderator: N Cohen, N Kanakaris Anatomical Specimens Laboratory		
08:30-10:00	Tibia—Debridement of contaminated open wound and resection of 5 cm of bone and plating of the defect created	N Cohen, N Kanakaris
10:00-11:30	Tibia: Cement spacer implantation and rotational gastrocnemius flap	T Wright
11:30-11:45	Coffee break	
11:45-13:15	Femur: RIA graft harvested—Tibia: Removal of cement spacer and application of RIA cage	I McFadyen R Bartoska
13:15-14:00	Lab—Ask the expert—Surgical Techniques	All faculty
14:00-14:30	Take home key messages and course closure	N Cohen I McFadyen
14:30	End of course	

Event information

Organization

AO Foundation

Sandeep Choudhry
Clavadelstrasse 8
7270 Davos, Switzerland
Phone: +41 79 627 08 65
Email: sandeep.choudhry@aofoundation.org

Participants' contact

Christof Pluemacher
Phone: +41 79 651 3690
E-mail: aoges.emea@aofoundation.org

Registration fee

Standard Fee 1980,00 CHF
AO Trauma Members Fee 1881,00 CHF
Included in the course fee are coffee breaks,
lunch (Day 1) a course dinner (17. Oct. 2024,
Seehaus Grill www.seehaus-luzern.ch), and course
certificate.

Cancellation policy

Cancellation policy: 50% until 30 days
before the event. No refund thereafter.

Online Registration

<https://bit.ly/3JKAHyi>



Language

English

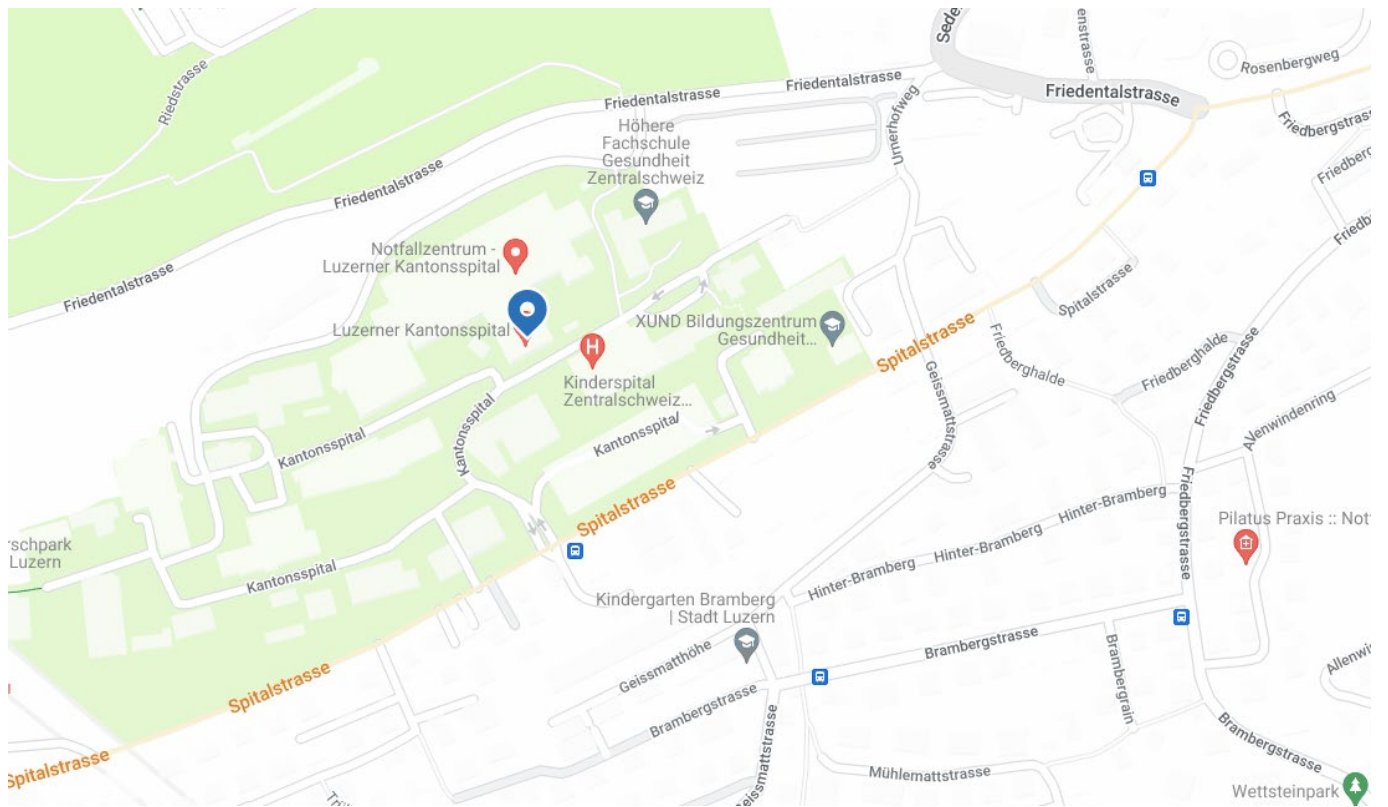
European CME accreditation

An application has been made to the UEMS-EACCME® in Brussels for CME accreditation of this event.

Venue

Luzerner Kantonsspital

Skills Lab
Haus 10,
1. Stock
Spitalstrasse
6000 Luzern 16
<https://www.luks.ch/standorte/standort-luzern/skills-lab>



General information

Event organization compliance

In certain countries where AO has no office but offers educational events, the AO cooperates with third party companies to conduct local organization and logistics, as well as to communicate with participants in the local language. In these cases, the AO has put rules and guidelines in place to ensure that this cooperation has no impact on the curricula, scientific program, or faculty selection.

AO funding sources

Unrestricted educational grants from different sources are collected and pooled together centrally by the AO.

All events are planned and scheduled by local and regional AO surgeon groups based on local needs assessments. We rely on industrial/commercial partners for in-kind support to run simulations/skills training if educationally needed.

Evaluation guidelines

All AO events apply the same evaluation process, which includes pre- and post-event online evaluation and on-site written questionnaires.

These evaluation tools help ensure that AO Trauma continues to meet your training needs.

Disclosures and conflicts of interest

Disclosure information and potential conflicts of interest (COI) can be viewed at the event webpage.

Intellectual property

Event materials, presentations, and case studies are the intellectual property of the event faculty. All rights are reserved. For more information, please see: www.aofoundation.org/legal.

Recording, photographing, or copying of lectures, practical exercises, case discussions, or any course materials is strictly forbidden.



The AO Foundation reserves the right to film, photograph, and audio record during its events. Participants must understand that in this context they may appear in these recorded materials. The AO Foundation assumes participants agree that these recorded materials may be used for AO marketing and other purposes and that they may be made available to the public.

Security

There will be a security check at the entrance of the building. Wearing of a name tag is compulsory during lectures, workshops, and group discussions.

No insurance

The event organization does not take out insurance to cover any individual against accidents, theft, or other risks.

Use of mobile phone

Mobile phone use is not allowed in the lecture halls and in other rooms during educational activities. Please be considerate of others by turning off your mobile phone.

Sponsor

We thank our major industry partner DePuy Synthes for contributing key in-kind support (materials and logistics), without which this event would not be possible, as well as an unrestricted educational grant.



Principles of AO educational events

1. Academic independence

Development of all curricula, design of scientific event programs, and selection of faculty are the sole responsibilities of volunteer AO network surgeons.

All education is planned based on needs assessment data, designed and evaluated using concepts and evidence from the most current medical education research, and reflects the expertise of the AO Education Institute (www.aofoundation.org).

Industry participation is not allowed during the entire curriculum development and planning process to ensure academic independence and to keep content free from bias.

2. Compliance to accreditation and industry codes

All planning, organization, and execution of educational activities follow existing codes for accreditation of high-quality education:

- Accreditation Criteria of the Accreditation Council for Continuing Medical Education, US (www.accme.org)
- ACCME Standards for Commercial Support: Standards to Ensure Independence in CME Activities (www.accme.org)
- Criteria for Accreditation of Live Educational Events of the European Accreditation Council for Continuing Medical Education (www.uems.eu)

Events that receive direct or indirect unrestricted educational grants or in-kind support from industry also follow the ethical codes of the medical industry, such as:

- Eucomed Guidelines on Interactions with Healthcare Professionals (www.medtecheurope.org)
- AdvaMed Code of Ethics on Interactions with Health Care Professionals (advamed.org)
- Mecomed Guidelines on Interactions with Healthcare Professionals (www.mecomed.org)

3. Branding and advertising

No industry logos or advertising (apart from the AO Foundation and its clinical divisions) are permitted in the area where educational activities take place.

Sponsors providing financial or in-kind support are allowed to have a promotional booth or run activities outside the educational area with approval from the event chairperson.

4. Use of technologies and products in simulations

In case simulations are chosen as an educational method to educate skills, we only use technology approved by the AO Technical Commission—a large independent group of volunteer surgeons developing and peer reviewing new technology.

More information about the AO Technical Commission and its development and approval processes can be found on the AO's website: www.aofoundation.org.

5. Personnel

Industry staff members are not permitted to interfere with the educational content or engage in educational activities during the event.