

# AO Trauma Europe Masters Course— Orthoplastics in Extremity Trauma

PROGRAM

5. – 6. September 2024

Bern, Switzerland



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**trauma and  
orthopedics**

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# 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



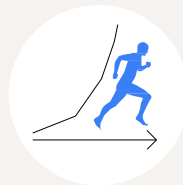
Fracture fixation providing absolute or relative stability, as required by the “personality” of the fracture, the patient, and the injury.

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 AO Trauma Course participant,

Welcome to the AO Trauma Europe Course—Orthoplastics in surgery of the extremity trauma, 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](http://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.



**Mark Reilly**  
Chairperson  
AO Trauma  
Education Commission



**Wa'el Taha**  
Chairperson  
AO Trauma  
International Board

## Course description

The course is delivered using a combination of small group discussions, case presentation, exercises with anatomical specimens, and summary lectures. All activities are moderated by an expert faculty in a highly interactive learning environment. Participants are encouraged to discuss the cases and content in an open manner and to share their own experiences.

## Goal of the course

The AO Trauma Europe Masters Courses 2024 address current concepts and state-of-the-art treatment options in orthopedic trauma. Each course covers one or more topics and has been planned based on the common and critical patient problems related to the specific topic.

## Target participants

Surgeons involved in or interested in the orthoplastic management of open fractures and complications of fracture management, including soft tissue breakdown and soft tissue defect, as well as bone infection. Participants must be able to communicate well in English.

## Learning objectives

At the end of the course, participants should be able to:

- Apply orthoplastic concepts to assess soft tissue and bone injuries
- Recognise complex injuries and identify factors contributing to outcome
- Plan timely and appropriate surgery using orthoplastic concepts to the management of open fractures
- Refer to current evidence and its value in injury management
- Apply AO Principles to the management of open fractures

## Chairpersons



### **Yves Harder**

Department of Plastic, Reconstructive & Aesthetic Surgery  
Ente Ospedaliero Cantonale (EOC), Ospedale Regionale die Lugano (ORL), Sede Ospedale Italiano (OIL), Lugano Switzerland



### **Philipp Stillhard**

Department of Surgery, Clinic for Orthopedic and Trauma Surgery  
Kantonsspital Chur  
Chur, Switzerland

## Faculty

### **Martin Clauss**

Center for Musculoskeletal Infections (ZMSI), Department for Orthopedics and Trauma Surgery, University Hospital Basel

### **Radu Olariu**

Department of Plastic & Hand Surgery, Inselspital Bern, University of Bern, Bern, Switzerland

### **Rik Osinga**

Center for Musculoskeletal Infections, Department of Plastic, Reconstructive, Aesthetic and Hand Surgery, University Hospital Basel

### **Herman Frima**

Department of Trauma Surgery, Northwest Hospital Group, Alkmaar, The Netherlands

## Keynote Speaker

### **Thomas Lustenberger**

Department of Orthopaedic and Trauma Surgery, Inselspital Bern, Switzerland

|             |  |                       |
|-------------|--|-----------------------|
| 07:30–08:00 | Participant registration               |                       |
| 08:00–08:05 | Welcome and introduction to the course | Y Harder, P Stillhard |

Module 1

Initial care of the injury

|             |  |                |
|-------------|--|----------------|
| 08:05–08:20 | Primary assessment of the trauma patient: The role of the trauma surgeon in ER | T Lustenberger |
| 08:20–08:35 | Compartment syndrome   | H Frima        |
| 08:35–08:50 | Degloving injuries   | R Olariu       |
| 08:50–09:05 | Open fractures – acute management from the view of the trauma surgeon          | P Stillhard    |
| 09:05–09:20 | Open fractures – acute management from the view of the plastic surgeon         | R Osinga       |

|             |              |  |
|-------------|--------------|--|
| 09:20–09:40 | Coffee break |  |
|-------------|--------------|--|

Module 2

Managing open fractures

|             |  |             |
|-------------|--|-------------|
| 09:40–12:45 | <b>Anatomical specimen laboratory 1</b> <ul style="list-style-type: none"><li>• Anterolateral thigh (ALT) flap</li><li>• Gracilis flap</li><li>• Local flaps, “keystone” flaps, perforator flaps</li><li>• Bridging external fixation—knee and ankle with safe corridors</li></ul> | All Faculty |
| 12:45–13:45 | Lunch break  |             |
| 13:45–15:15 | <b>Discussion group 1</b><br><b>Assessment of soft tissue and bone injury—timing and prioritization of surgical care</b><br>Group A<br>Group B   | All Faculty |

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## Module 3

### Managing vascular injuries and critically injured extremity

|             |  |             |
|-------------|--|-------------|
| 15:15–15:30 | Vascular injuries—diagnosis and treatment  | P Stillhard |
| 15:30–15:45 | Staged approaches to the bone in complex open fractures  | H Frima     |
| 15:45–16:00 | Managing the unsalvageable extremity   | R Olariu    |
| 16:00–16:15 | Incision placement and soft tissue handling during surgery   | Y Harder    |
| 16:15–16:35 | Coffee Break   |             |
| 16:35–18:00 | <b>Discussion group 2</b><br><b>Open fractures—fracture management and soft tissue closure respectively reconstruction</b><br>Group A<br>Group B | All Faculty |

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Friday

September 6, 2024

| Module 4   |  |                    |
|--|--|--------------------|
| Managing bone and soft-tissue defect in extremity trauma |  |                    |
| 08:00–08:15  | Managing bone injury   | P Stillhard        |
| 08:15–08:30  | Managing bone loss-The view of the orthopedic surgeon  | M Clauss           |
| 08:30–08:50  | Managing bone loss-The view of the plastic surgeons: Diverse concepts  | R Osinga, R Olariu |
| 08:50–09:05  | The role of negative pressure wound therapy in extremity trauma  | R Olariu           |
| 09:05–09:20  | Managing soft-tissue injury and defect: Why, what and when?  | Y Harder           |
|  |  |                    |
| 09:20–09:40  | Coffee Break   |                    |
| 09:40–12:50  | <b>Anatomical specimen laboratory 2</b> <ul style="list-style-type: none"><li>• Decompression fasciotomy</li><li>• Myocutaneous gastrocnemius flap, evtl. medial sural artery perforator flap gastrocnemius flap</li><li>• Soleus / hemi-soleus flap</li><li>• Peroneus brevis flap</li><li>• Medial plantar artery flap (instep-flap)</li><li>• Fibula flap</li></ul> | All Faculty        |
| 12:50–13:50  | Lunch Break  |                    |

| Module 5  |   |          |
|---|---|----------|
| Managing complications (infection, bony nonunion, flap failure) |   |          |
| 13:50–14:05   | Non-surgical treatment of fracture related infection (FRI)        | M Clauss |
| 14:05–14:20   | Surgical management of delayed and nonunion of fractures          | H Frima  |
| 14:20–14:35   | Surgical management of FRI and concomitant soft tissue problems   | R Osinga |
| 14:35–14:50   | Flap failure—management protocols                                 | R Olariu |
| 14:50–15:05   | Non-flap based alternative closure techniques in extremity trauma | Y Harder |

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|             |  |                       |
|-------------|--|-----------------------|
| 15:05–16:15 | <b>Discussion group 3</b><br><b>Managing complications: FRI, Nonunion, flap related-complications, ...</b><br>Group A<br>Group B | All Faculty           |
| 16:15–16:30 | Summary of the day, evaluation, closing remarks, and distribution of certificates  | Y Harder, P Stillhard |

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# Event information

## Organization

### AO Foundation

Stefanie Walser  
Clavadelerstrasse 8  
7270 Davos Platz, Switzerland  
Email [stefanie.walser@aofoundation.org](mailto:stefanie.walser@aofoundation.org)

## Participants' contact:

AO Global Events Services  
E-mail [aoges.emea@aofoundation.org](mailto:aoges.emea@aofoundation.org)

## Registration fee

CHF 1,900  
Included: Course materials, coffee and lunch breaks, course dinner

## Online registration

<https://bit.ly/OrthoplasticsExtremityBern2024>



## Language

English

## European CME accreditation

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

Additionally an application has been made to:  
Swiss Orthopaedics  
Swiss Society of Plastic, Reconstructive and Aesthetic Surgery  
Swiss Society of Surgery

## 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 and/or skills training if educationally necessary.

## Venue

University of Bern  
Institute of Anatomy  
Baltzerstrasse 2  
CH-3012 Bern



# General information

## Evaluation guidelines

All AO Trauma 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

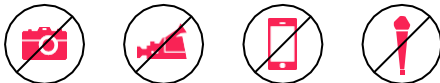
Disclosure information and potential conflicts of interest (COI) can be viewed at the event webpage.

## 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](http://www.aofoundation.org/legal).

**Recording, photographing, or copying lectures, practical exercises, case discussions, or any event materials is strictly forbidden. Participants violating intellectual property will be dismissed.**



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 the AO's 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 accident, theft, or other risks.

## Use of mobile phones

Use of mobile phones is not permitted in the lecture halls or in other rooms during educational activities. Please be considerate of others by turning off your mobile phone.

## Visa

Contact your hotel directly which will issue your visa and invoice you.

## Dress code

Casual

## Sponsors

We thank our major industry partners, 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.



# Hygiene guidelines for AO educational events

## **General protective measures must be observed throughout the event**

- Routine cleaning and disinfection of frequently touched surfaces
- Face masks must be worn through the entire duration of the event
- Frequent hand hygiene (when entering and exiting rooms)
- Hand disinfectants must be provided at each door
- Physical distancing of min. 1.5 m between persons at AO events
- Respiratory etiquette (use masks, proper coughing etiquette, etc.)
- Visual reminders of proper measures and etiquette must be placed at doors

## **At practical-exercise stations**

- Personal Protective Equipment (PPE) surgical face masks and non-sterile, latex-free examination gloves must be worn by all participants and faculty
- Surgical face masks and gloves must be stocked in sufficient numbers, and made available at the entrance of practical-exercise rooms
- All PPE must be disposed of after the end of the practical-exercise session in a dedicated place. New PPE must be used for subsequent sessions
- All instruments sets must be cleaned after the lab (chemo-thermic 120° C)
- If necessary, adapt the quantity of workstations per table to meet space requirements

# 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](http://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](http://www.accme.org))
- ACCME Standards for Commercial Support: Standards to Ensure Independence in CME Activities ([www.accme.org](http://www.accme.org))
- Criteria for Accreditation of Live Educational Events of the European Accreditation Council for Continuing Medical Education ([www.uems.eu](http://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](http://www.medtecheurope.org))
- AdvaMed Code of Ethics on Interactions with Health Care Professionals ([www.advamed.org](http://www.advamed.org))
- Mecomed Guidelines on Interactions with Healthcare Professionals ([www.mecomed.com](http://www.mecomed.com))

## 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 practical sessions

In case practical sessions are chosen as an educational method to educate skills, the technologies and products used have been approved or reviewed by the AO Technical Commission—a large independent group of volunteer surgeons developing and peer-reviewing new technology on behalf of the AO Foundation.

Any technology and/or products used in the practical sessions of this event have been found suitable to serve the defined educational purposes.

This does not imply any statement about its use and performance in actual clinical scenarios.

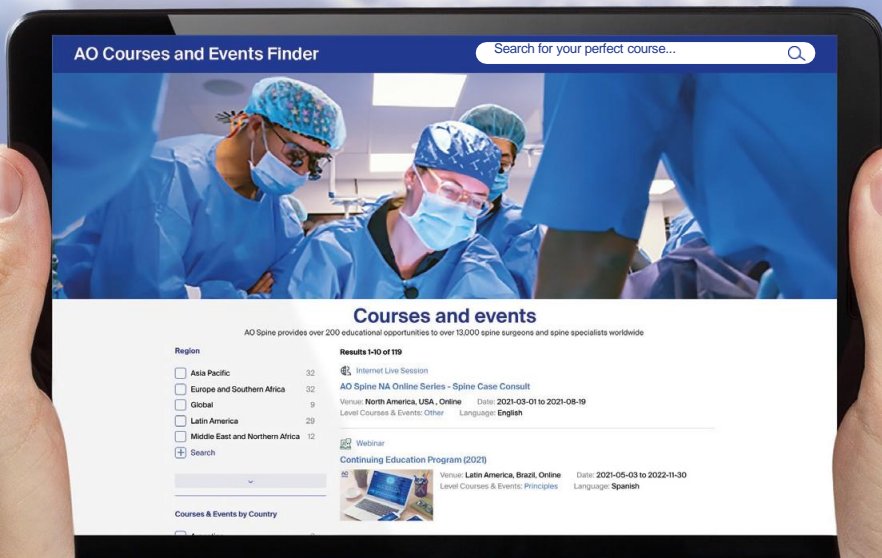
More information on the AO Technical Commission can be found on the AO's website: [www.aofoundation.org/tc](http://www.aofoundation.org/tc).

## 5. Personnel

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



# Find your next learning activity



**Enhance your career, improve your knowledge, skills and network with the world's leading education provider to health care professionals working in the fields of trauma and musculoskeletal disorders.**

Choose from over 800 events each year including face-to-face hands-on surgical skills courses, seminars, and case discussion workshop groups as well as online courses, webinars, panel discussions and more. Courses can be filtered by specialty, country, topic and level.

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AO CMF



AO Recon



AO VET



AO Sports



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Changing  
Lives

[www.aofoundation.org/our-courses-and-events/course-finder](http://www.aofoundation.org/our-courses-and-events/course-finder)

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More information at  
[www.aofoundation.org](http://www.aofoundation.org)

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and shape the  
future of AO Trauma



**Global  
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**Develop**  
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professional career



**Share and exchange**  
your knowledge



**AO Trauma is the leading global orthopedic trauma network** with a unique culture of surgeon leadership, camaraderie, volunteerism, and mutual respect.



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