

AO Trauma Course— **Advanced Principles of Fracture Management for Swiss Surgeons**

December 8–12, 2025
Davos, Switzerland

Lecture hall:
Aspen 1

EVENT PROGRAM

Event description

This AO Trauma Course—Advanced Principles of Fracture Management for Swiss Surgeons is one of the several 2024 competency-based curriculum events built on a specific framework of competencies and learning objectives. They feature a balanced mix of educational methods with a strong focus on interactive sessions.

Online pre-course self-assessment prepares participants for the course and allows the faculty to tailor the course to participants' needs. Before attending the course, participants are expected to complete the online self-assessment questionnaire.

The course will be taught in a modular format. Each module consists of several evidence-based lectures, which cover the key information required. Discussing cases in small groups will help participants to understand decision-making and management skills. Debates and interactive sessions promote interaction between faculty and course participants. In practical exercises, participants will be trained in the application of various techniques.

At the end of the course, participants will be able to assess and manage complex fractures according to the AO principles.

After the course, an online post-course self-assessment will help participants to assess how much they have learned.

After the course, the participant will not only have a deeper knowledge of advanced trauma management but also be reconnected to the trauma community in Switzerland.

Goal of the event

The AO Trauma Course—Advanced Principles of Fracture Management for Swiss Surgeons is part of AO Trauma's educational program teaching current concepts and fundamental principles in the treatment of injuries incorporating the latest techniques in operative fracture management. The AO Trauma Advanced Principles course builds on the AO principles and techniques learned in the AO Trauma Basic Principles course and focuses on more complex injuries.

Target participants

The AO Trauma Course—Advanced Principles of Fracture Management for Swiss Surgeons is targeted at newly certified surgeons and residents in their fourth to sixth year of training and intending to specialize in general surgery or in orthopedic surgery with a commitment to trauma.

All surgeons regardless of nationality but working at a Swiss hospital can participate in this course.

It builds on the AO principles and techniques of the basic principles course, where participants have completed the AO Trauma Course—Basic Principles of Fracture Management. Participants must be actively involved in trauma management.

Learning objectives

On completion of this course, participants will be able to:

- Define, assess, and treat complex fractures of the upper and lower extremities using advanced and specific techniques
- Outline, classify, and formulate a treatment plan for pelvic injuries
- Apply reduction techniques in fracture management with special attention to soft tissue
- Perform fixation of complex fractures
- Discuss the importance of arthroplasty option in trauma management
- List and avoid typical complications in complex fracture treatment

Chairpersons



Philippe Vial

Hôpital Cantonal, University of Fribourg, Switzerland



Philipp Stillhard

Kantonsspital Graubünden, Chur

Faculty

Emanuel	Benninger	Kantonsspital Winterthur	Winterthur	Switzerland
Samy	Bouaicha	Universitätsspital Balgrist	Zurich	Switzerland
Hans-Curd	Frei	Spital Davos	Davos	Switzerland
Silvio	Gujer	Spital Frutigen	Frutigen	Switzerland
Näder	Helmy	Kantonsspital Solothurn	Solothurn	Switzerland
Melanie	Leimbacher	Stadtspital Zürich Waid	Zurich	Switzerland
Cesare	Marazzi	Spital Oberengadin	Samedan	Switzerland
Jochen	Müller	Ospedale Regionale Lugano	Lugano	Switzerland
Valentin	Neuhaus	Universitätsspital Zürich	Zurich	Switzerland
Birgit	Oberreiter	Universitätsspital Basel	Basel	Switzerland
Alex	Schallberger	Spital Nidwalden	Stans	Switzerland
Moritz	Tannast	Inselspital Bern	Bern	Switzerland
Gregoire	Thürig	Kantonsspital Schaffhausen	Schaffhausen	Switzerland
Jörg	Winkler	Spital Davos	Davos	Switzerland

Guest lecturers

Emanuel	Gautier	Hôpital Cantonal, University of Fribourg	Fribourg	Switzerland
Hans-Christoph	Pape	Universitätsspital Zürich	Zürich	Switzerland

Sunday

December 7, 2025

15:00	Opening of the Davos Congress Centre
15:00–17:00	Registration of participants
17:00–19:00	Opening ceremony and founders' reception

Monday

December 8, 2025

Location: Aspen 1

Module 1

Moderator: P Vial

Review of principles and technique

On completion of this module, participants will be able to:

- Reiterate the principles of absolute and relative stability
- Explain the different available implants
- Describe the role of soft tissue in fracture management

08:00–08:15	Welcome and introduction	P Vial, P Stillhard
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08:15–08:35	Principles of fracture treatment	S Bouaicha
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08:35–08:50	Functions of the hardware—Screws, plates, nails – are their differences in relation to the bone quality	S Bouaicha
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08:50–09:20	The past, the present (...and the future) of fracture treatment	E Gautier
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09:20–09:40	Soft-tissue handling in fracture treatment	P Vial
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09:40–10:00	Discussion and case examples	V Neuhaus
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10:00-10:30	Coffee break	
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Module 2

Moderator: S Bouaicha

Fractures of the upper extremity

On completion of this module, participants will be able to:

- Identify the expected outcomes and appropriate treatment options for clavicular fractures
- Evaluate evidence for fixation of proximal humeral fractures vs replacement
- Identify indications for surgical treatment of humeral shaft fractures
- Define strategies in the treatment of the distal humeral fractures
- Describe surgical approaches to the distal humerus
- Discuss different treatment options of distal radial fractures

10:30-10:45	Fractures of the clavicle	B Oberreiter
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10:45-11:00	Proximal humeral fractures osteosynthesis	P Vial
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11:00-11:15	Humeral shaft fractures	J Winkler
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11:15-11:30	Intraarticular fractures of the distal humerus	E Benninger
11:30-11:45	Discussion	
11:45-11:50	Location change to the practical exercise room	
11:50-11:55	Introduction to practical exercises	P Vial
11:55-13:00	Practical exercise 1 Proximal humerus—Fixation of an 11C1 four-fragment fracture using a proximal humeral internal locking system	B Oberreiter
13:00-14:00	Lunch break	
14:00-14:45	SHARD (Live Surgery) Surgical approaches to the distal humerus	P Vial, E Benninger
14:45-14:50	Location change to the practical exercise room	
14:50-16:15	Practical exercise 2 Fixation of a type 13C3 fracture in the distal humerus using an elbow system variable angle locking compression plate (VA-LCP) perpendicular plating	E Benninger
16:15-16:35	Coffee break	
16:35-16:50	Fractures of the forearm	S Gujer
16:50-17:05	Distal radial fractures treatment from dorsal, palmar, nowhere	C Marazzi
17:05-17:20	External fixator upper extremity – when is it necessary, how we do it	M Leimbacher
17:20-17:30	Discussion and evaluation	

Tuesday

December 9, 2025

Location: Landwasser

Module 2 (continued)

Moderator: S Bouaicha

Fractures of the upper extremity

08:00–09:00 **Discussion group 1**

Fractures of the upper extremity

Group 1: Landwasser

Group 2: Landwasser

Group 3: Landwasser

Group 4: Landwasser

Group 5: Landwasser

Group 6: Landwasser

Group 7: Landwasser

09:00–09:05 Location change to the practical exercise room Jakobshorn

09:05–10:05 **Practical exercise 3**

C Marazzi

Distal radius—Two-column distal radial fracture

10:05–10:25 Coffee break

Module 3

Moderator: N Helmy

Principles in pelvic fractures

On completion of this module, participants will be able to:

- Identify the correct classification and appropriate treatment options for pelvic fractures
 - Outline emergency pelvic treatment
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10:25–10:40 Principles of pelvic injuries

M Tannast

10:40–10:55 Treatment concepts in pelvic fractures

M Tannast

10:55–11:05 Discussion

11:05–11:10 Location change to the practical exercise room Jakobshorn

11:10–12:45 **Practical exercise 4**

M Tannast

Supraacetabular external fixator, C-clamp, standard external fixator for pelvis

12:45–13:55 Lunch break

Module 4

Moderator: M Tannast

Femoral fractures

On completion of this module, participants will be able to:

- Outline the management of proximal femoral fractures in young patients and in the elderly
- Explain biomechanics of the trochanteric region including the forces acting on the fracture fragments
- Identify expected outcomes and appropriate treatment options for trochanteric fractures
- Assess the complexity of distal femoral fractures
- Compare pros and cons of open osteosynthesis, minimally invasive plate osteosynthesis (MIPO), and intramedullary (IM) nailing in femoral fractures
- Explain the Vancouver classification

13:40–13:55	Femoral head fractures—Treatment and surgical approach	N Helmy
13:55–14:10	Femoral neck fractures—Different concepts for different patients	S Gujer
14:10–14:25	Current treatments of peritrochanteric femoral fractures	V Neuhaus
14:25–14:40	Femoral shaft fracture—from proximal to distal	HC Frei
14:40–14:55	Discussion	
14:55–15:15	Coffee break	
15:15–15:30	Articular fractures of the distal femur—Treatment options and complications	A Schallberger
15:30–15:45	Periprosthetic femoral shaft fracture—Is stem revision the only option?	N Helmy
15:45–15:55	Discussion	
15:55–16:00	Location change to the discussion group rooms	
16:00–17:00	Discussion group 2 Fractures of the proximal femur Group 1: Landwasser Group 2: Landwasser Group 3: Landwasser Group 4: Landwasser Group 5: Landwasser Group 6: Landwasser Group 7: Landwasser	
17:00–17:10	Evaluation	
17:45–20:30	AO Davos Courses night: Davos Congress Centre	

Wednesday

December 10, 2025

Location: Foyer C2

Module 4 (continued)

Moderator: M Tannast

Femoral fractures

08:00–09:15	Practical exercise 5 Proximal femur—Fixation of a reversed intertrochanteric three-part fracture using trochanteric femoral nail advanced (TFN-A) system	V Neuhaus
09:15–09:20	Location change to the discussion group rooms	
09:20–10:20	Discussion group 3 Fractures of the distal femur and femoral shaft Group 1: Landwasser Group 2: Landwasser Group 3: Landwasser Group 4: Landwasser Group 5: Landwasser Group 6: Landwasser Group 7: Landwasser	
10:20–10:40	Coffee break	
10:40–12:40	Practical exercise 6 Fixation of a distal intraarticular femoral fracture (type 33C2.1)	A Schallberger
12:40–13:30	Lunch break	

Module 5

Moderator: J Müller

Lower leg fractures

On completion of this module, participants will be able to:

- Evaluate surgical options and techniques for open reduction and external fixation (ORIF) of the tibial plateau fractures
 - Evaluate indications and techniques for extreme IM nailing of the tibia
 - Describe surgical approaches to the tibia
 - Select and apply an appropriate classification system
 - Explain the decision-making process in ankle fractures
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13:30–13:45	Proximal, distal, and segmental tibial shaft fractures—Treatment strategies, also in case of a compartment	P Stillhard
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13:45–14:00	Complex tibial plateau fractures—Strategies for fixation	G Thürig
14:00–14:45	SHARD (live surgery): Surgical approaches to the tibia plateau	P Stillhard, G Thürig
14:45–15:05	Coffee break	
15:05-15:20	Complex malleolar fractures	M Leimbacher
15:20-15:35	Pilon fractures—Treatment options	P Stillhard
15:35-15:40	Location change to the discussion group rooms	
15:40-16:40	Discussion group 4 Fractures of the tibia Group 1: Landwasser Group 2: Landwasser Group 3: Landwasser Group 4: Landwasser Group 5: Landwasser Group 6: Landwasser Group 7: Landwasser	
16:40-16:45	Evaluation	

Thursday

December 11, 2025

Location: Foyer C2

Module 5 (continued)

Moderator: J Müller

Lower leg fractures

08:00-09:10	Practical exercise 7 Management of a type 41C3 bicondylar tibial plateau fracture using a VA-LCP	HC Frei
09:10–09:15	Location change to discussion groups	
09:15-10:15	Discussion group 5 Fractures of the ankle and foot Group 1: Landwasser Group 2: Landwasser Group 3: Landwasser Group 4: Landwasser Group 5: Landwasser Group 6: Landwasser Group 7: Landwasser	
10:15-10:45	Coffee break and location change to the practical exercise room	
10:45-12:30	Practical exercise 8 Management of a type 43C2.3 pilon tibial fracture using a distal tibial LCP	M Leimbacher
12:30-13:30	Lunch break	
13:30–13:40	Group picture and location change to practical exercise room	

Module 6

Moderator: V Neuhaus, P Stillhard, P Vial

Interactive case analysis and solution finding

On completion of this module, participants will be able to:

- Recognize and analyze reasons for a nonunion
 - Debate the role of surgical intervention and antibiotics in the management of infected implants
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13:40–13:55	General management of nonunion—Why all fractures do not heal?	A Schallberger
13:55–14:10	Infection after ORIF—When to keep the implants?	E Benninger

14:10-14:40	Case analysis lower extremity	P Stillhard
14:40-15:10	Case analysis proximaler femur	V Neuhaus
15:10-15:40	Case analysis upper extremity	P Vial
15:40-16:00	Discussion	
16:00-16:10	Evaluation	

Friday

December 12, 2025

Location: Aspen 1

Module 7

Moderator: E Benninger

Foot fractures

On completion of this module, participants will be able to:

- Identify patterns of calcaneal injuries
- Explain the risk of complications following injuries to the talus

08:00-08:15	Calcaneal fractures—Predicting and avoiding problems	J Müller
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08:15-08:30	Talar neck fractures and complications	J Müller
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08:30-09:40	Practical exercise 9	J Müller
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Open reduction and internal fixation of intraarticular calcaneal fractures using a variable-angle calcaneal locking plate

09:40-10:00	Coffee break	
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10:00-11:00	Discussion group 6	
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You are on call—fractures from head to toe

Group 1: Landwasser

Group 2: Landwasser

Group 3: Landwasser

Group 4: Landwasser

Group 5: Landwasser

Group 6: Landwasser

Group 7: Landwasser

11:00-11:05	Location change to the lecture room	
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Module 8

Moderator: P Stillhard

It is getting complicated

On completion of this module, participants will be able to:

- Set priorities for management of mangled extremities
- Know the principles of polytrauma management

11:05-11:20	Mangled extremity management—When is salvage reasonable?	V Neuhaus
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11:20-11:50	Polytraumatized patients—Principles of fracture treatment	HC Pape
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11:50-12:00	Summary of the week, course feedback, evaluation & closing remarks	P Stillhard, P Vial
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12:00-12:30	Sandwich break
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Event organization

AO Foundation

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Participant information and contact

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Registration fee

Course full fee: CHF 2300

Included in the course fee: coffee breaks, opening ceremony and AO Davos Courses night and course certificate.

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

Online registration

<https://bit.ly/DC25AdvSwiss>



Language

English

Disclosures and conflicts of interest (COI)

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

National CME accreditation

An application has been made to SGC and Swiss Orthopaedics.

Event organization compliance

In 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.

Venue

Davos Congress Centre

Talstrasse 49A

7270 Davos Platz

Switzerland

Phone +41 81 414 62 00



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.

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 absolutely forbidden.



The AO Foundation reserves the right to film, photograph, and audio record during their 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 made available to the public.

Use of social media

During the AO Davos Courses 2025 you can post about your experience using the #AODavosCourses2025 hashtag. While we encourage you to share your AO Davos Courses 2025 experience with your online network, it is expressly forbidden to share any images or recordings from inside the course.

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.

Mobile phone use

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.

Picture gallery

Check out www.aodavoscourses.org for a daily selection of pictures from the AO Davos Courses 2024, the best from last year's courses, and a selection of photographs from the first-ever AO Davos Courses.

Dress code

Warm clothes and suitable shoes are recommended.

Sponsors

We thank our major industry partners, Johnson & Johnson MedTech for their key contribution in the form of an educational grant and in-kind support (material, technical staff and logistics) and Siemens Healthineers for their key contribution in the form of an educational grant.

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SIEMENS
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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.