

AO Trauma and AO Recon Course— Fracture Arthroplasty of the Shoulder

February 15–17, 2027

Madrid, Spain

PROGRAM



Mission

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

Purpose statement

AO Recon is a global network of orthopedic surgeons committed to best-in-class education in joint preservation and replacement.

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,

It is with great pleasure that we welcome you to this AO course that offers surgeons a training on fracture arthroplasty of the shoulder.

Over the 2-day program, renowned expert surgeons will lead interactive discussion groups and deliver technical know-how in practical exercises to develop your decision-making competency.

Your current level of knowledge, attitudes, and skills will be challenged throughout the course. The best-in-class faculty will provide you a memorable learning experience that will remain with you for a lifetime.

We hope that you will immediately integrate these insights into your daily practice to reach our shared goal to improve patient care through surgical excellence.

Yours sincerely,



Rodrigo Pesantez
Chairperson AO Trauma
Education Commission



Mark Reilly
Chairperson AO Trauma
International Board



Carsten Perka
Chairperson AO Recon
Steering Board



Bassam Masri
Chairperson AO Recon
Education Forum

Goal of the event

This course teaches the pathoanatomy of arthroplasty of fractures of the shoulder and its common complications: unexplained pain; prosthetic instability and impingement; and periprosthetic fractures of the humerus and scapula.

Target participants

This course is for upper extremity surgeons with an interest in anatomy and its application to clinical problem-solving.

Learning objectives

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

1. Explain the pathoanatomy of arthroplasty of fractures of the shoulder and its common complications
2. Perform a reverse total shoulder replacement for fracture
3. Describe exposures of the neurovascular structures relevant to reverse total shoulder replacement for a fracture, including the axillary, musculocutaneous and radial nerves
4. Discuss the factors leading to humeroscapular impingement and prosthetic instability
5. Demonstrate methods of repairing the humeral tubercles and explain how these confer stability and control of motion
6. Develop methods of fixation of a fracture of the acromiospinal region
7. Describe the optimal treatment of a periprosthetic humeral shaft fracture
8. Examine how methods of repairing the humeral tubercles confer stability and control of motion
9. Understand the optimal treatment of a periprosthetic humeral shaft fracture
10. Develop solutions for their daily clinical problems, based on an understanding of the applied anatomy

Event description

Following in-depth discussions of selected cases participants will create, with expert guidance, a fracture model of the proximal humerus before practicing the implantation of a Reverse Total Shoulder Replacement for fracture, and subsequently developing exposures of the neurovascular structures relevant to these problems, including the axillary, musculocutaneous and radial nerves.

Through the exploration of various lateralisation, distalisation and medialisation strategies the participant will develop an understanding of the many factors leading to humeroscapular impingement and prosthetic instability.

The participants will create a fracture of the acromiospinal region and will discuss the concept of 'overstuffing' prior to developing methods of fixation of this fracture.

The participant will develop methods of repairing the humeral tubercles and examine how these confer stability and control of motion. Through extensile exposure of the arm, the participant will understand the optimal treatment of a periprosthetic humeral shaft fracture. Application of this experience will help the participant to develop solutions for their daily clinical problems, based on an understanding of the applied anatomy.

Chairpersons



Martin Jaeger
University Hospital Freiburg
Freiburg, Germany



Simon Lambert
The Princess Grace Hospital
London, United Kingdom

Regional faculty

Alessandro Marinelli	Istituto Ortopedico Rizzoli	Bologna, Italy
Andreas Niemeier	Universitätsklinikum Hamburg-Eppendorf	Hamburg, Germany
Johan Scheer	University Hospital Linköping	Linköping, Sweden

National faculty

Fernando Marco Martínez	Hospital Clinico San Carlos, Complutense University	Madrid, Spain
Yaiza Lópiz Morales	Hospital Clinico San Carlos, Complutense University	Madrid, Spain

Monday

February 15, 2027

Start	End	Location:
20:00	20:30	Welcome and introduction to the course, the faculty, and participants
20:30	22:30	Course dinner followed by case presentations and fire-side discussion

Tuesday

February 16, 2027

Start	End	Topic	Faculty
08:30	08:45	Registration of participants	
08:45	09:00	Welcome and introduction	M Jaeger, S Lambert
Module 1 Moderator: S Lambert The Pathoanatomy of Unexplained Pain			
09:00	10:00	Case-based discussions in small groups: The neuropathology of pain related to shoulder arthroplasty	All faculty
10:00	10:20	Coffee break	
10:20	11:50	Anatomical practice 1: The deltopectoral approach and implantation of a reverse fracture prosthesis	M Jaeger All faculty
11:50	12:10	Coffee break	
12:10	13:40	Anatomical practice 2: Extensile exposure of the infraclavicular region, Close examination of the pericoracoid region	S Lambert All faculty
13:40	14:00	Summary: solutions for cases discussed in module 1 based on anatomical work	M Jaeger
14:00	14:45	Lunch break	
Module 2 Moderator: F Marco The Pathoanatomy of Instability			
14:45	15:45	Case-based discussions in small groups: The pathobiomechanics of instability of shoulder arthroplasty	All faculty
15:45	17:15	Anatomical practice 3: Creation of the posterior segment (greater tuberosity) osteotomy and supraspinatus excision	J Scheer All faculty
17:15	17:40	Coffee break	
17:40	19:10	Anatomical practice 4: The pathoanatomy of impingement; the pathoanatomy of instability	F Marco All faculty
19:10	19:30	Summary: solutions for cases discussed in module 2 based on anatomical work	J Scheer

Wednesday

February 17, 2027

Start	End	Topic	Faculty
08:30	08:40	Registration of participants	
Module 3			
Moderator: J Scheer			
The Pathoanatomy of Periprosthetic Fractures			
08:40	10:10	Case-based discussions in small groups: The management of periprosthetic fractures	All faculty
10:10	11:40	Anatomical practice 5: Extensile exposure of the anterior humerus, ORIF planning using Long Philos system	S Lambert All faculty
11:40	12:00	Coffee break	
12:00	13:30	Anatomical practice 6: Exposure of the acromiospinal process; osteotomy, and fixation	A Niemeier All faculty
13:30	13:50	Summary: solutions for cases discussed in module 3 based on anatomical work	A Niemeier
13:50	14:20	Panel discussion: Precourse case solution	M Jaeger
14:20	14:30	Summary / commitment to change / evaluations	M Jaeger, S Lambert
14:30	15:00	Lunch and departure	

Event information

Organization

AO Foundation

Malene Liechti
Clavadelerstrasse 8
7270 Davos Platz, Switzerland
Phone: +41 79 680 69 96
E-mail: malene.liechti@aofoundation.org

Participants' contact

Sonia Lotf
Phone: +41 79 848 57 86
E-mail: sonia.lotf@aofoundation.org

Registration fee

1650 EUR

Included in the registration fee are coffee breaks, lunch breaks, course dinner, and a course certificate.

Cancellation policy

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

Online registration

[Link](#)

Language

English

European CME accreditation

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

Venue

Complutense University of Madrid

Plaza de Ramón y Cajal, s/n.

Facultad de Medicina

Pavilion 6, 1st floor

28040 Madrid

Spain

Phone +34 91 3941374

Website <https://www.ucm.es/cdcysd/>

Sponsor

We thank our major industry partner, DePuy Synthes, for their invaluable contributions, including:

- In-kind support (materials, technical staff, and logistics)
- Educational grant



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 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 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.

Security

There will be a security check at the entrance of the building. Wearing 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.

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.