AO Spine Online Course—Surgeon Leadership Education

Self-directed learning experience
October 26–December 2, 2020

Synchronous live event
December 3–5, 2020
14:00–18:00 CET
Mission
The AO's mission is promoting excellence in patient care and outcomes in trauma and musculoskeletal disorders.

Purpose statement
The global academic spine community promoting excellence in patient care and outcomes.

The AO Spine principles

1. Stability
   Stabilization to achieve a specific therapeutic outcome

2. Alignment
   Balancing the spine in three dimensions

3. Biology
   Etiology, pathogenesis, neural protection, and tissue healing

4. Function
   Preservation and restoration of function to prevent disability
Mission
Purpose statement
The AO principles of fracture management

Welcome

Event description

Goals of the course
Target participants
Learning objectives

Chairpersons and faculty

Event structure

Thursday, December 3, 2020

Friday, December 4, 2020

Saturday, December 5, 2020

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Event information and logistics

General information

Sponsors

Principles of AO educational events

AO Research Institute Davos (ARI)
Welcome

Dear AO Spine online course participant,

It is our honor and pleasure to welcome you to the AO Spine Online Course—Surgeon Leadership Education.

Leadership is a core competency that is required in almost every aspect of a surgeon’s daily work. It is most apparent in the operating room (OR), but no less required in outpatient clinics, at clinical meetings, and in teaching. A surgical leader will be able to create the right environment for his/her coworkers to ensure that together they achieve the best team performance and patient outcomes. Leadership involves establishing a clear vision and being able to communicate that vision to create an atmosphere of supportive collaboration to realize it. Leadership in surgery can be challenging due to the complexity of situations that are involved, often with high levels of stress and urgency. Moreover, a wide range of staff with different skills needs to be supported and coordinated for effective teamwork. In surgical practice, leadership cannot be avoided, and the different aspects of clinical leadership are enable high-quality surgical practice and best possible patient outcomes.

We sincerely hope you enjoy your participation in this program and look forward to this chance to learn together.

Sincerely yours,

Emre Acaroglu
Chairperson
AO Spine Education Commission
Event description

The AO Spine Online Course—Surgeon Leadership Education will consist of two parts. The first part is a six-week, self-directed learning experience with educational content that includes recorded lectures, webinars, and reading material, as well as a discussion platform on which you can reflect and discuss your learnings with your faculty and peers.

The second part of the course is a three-day, synchronous, live online event (December 3–5) during which you will participate in live lectures and, along with the faculty, take part in live discussions.

Although leadership is a core competency expected of every surgeon, there has traditionally been very little training on the subject in medical schools or during subsequent surgical training.

The AO Surgeon Leadership Program gives you the tools and training to become a better clinical leader in creating a shared understanding, being an effective and clear communicator, supportive of other team members, and creating a safe environment for audit and feedback. You will be equipped not only with theoretical understanding but also with practical skills required for effective surgical practice and improved patient safety.

This program is committed to offering you a high-quality educational experience and helping you in implementing your knowledge for the benefit of your patients. Your experiences with us will result in the realization of meaningful knowledge, skills, and attitudes that translate easily into your real-world practices.
Goals of the course

The program will address the needs of current surgeon leaders, aspiring and emerging leaders, and surgeons entering practice, and help them acquire the non-clinical competencies that are integral to their success within a clinical setting. With clinical case scenarios and discussions that relate to both providers and patients, the program aims to equip surgeons with the knowledge, skills and attitudes that will complement their technical surgical skills to achieve best possible patient care.

Target participants

The target audience includes all fully qualified medical specialists who aspire to leadership or are emerging as leaders, and see a need to improve their knowledge and skills in nonclinical competencies.

Learning objectives

Leadership and situational awareness
- Implement a shared vision and lead teams to accomplish it.
- Exhibit situational awareness, including ability to deal with and manage changes, anticipate events and challenges.
- Apply leadership attributes to resolve challenges and manage conflict.

Teamwork and collaboration
- Work efficiently and respectfully in a multiprofessional environment to provide safe, high-quality, patient-centered care.
- Implement strategies to control conflict situations and promote more productive interactions.

Decision-making and critical thinking
- Recognize and respond to the complexity, uncertainty, and ambiguity in clinical decision-making.

Communication
- Implement effective communication strategies and tactics to manage and lead teams.

Professionalism
- Exhibit appropriate professional behaviors in all aspects of practice demonstrating honesty, integrity, commitment, compassion, respect, and humility.

Wellness
- Demonstrate a commitment to promote and maintain mental, physical, and emotional health of self and others.
Chairperson

Teija Lund, Helsinki University Hospital, Finland

Educational advisor

Bryan Ashman, Canberra Hospital, Australia

International faculty

Chitra Subramaniam, United States
Event structure

**Week 1:**
Introduction

- Introduce yourself in the "Introduction" forum.
- Watch the video "Nonclinical competencies—the need and necessity."
- Respond and react to the video based on the posted questions in the forum.

**Week 2:**
Surgeon leadership in clinical setting and situational awareness

- Read the articles "Good medical leadership assessed by doctors in training," by Virtanen, Mikkola and Parviainen and, "Followership and its relevance in surgery" by Watters.
- Response and react based on the posted questions in the forum.

**Week 3:**
Decision making and critical thinking

- Watch the video, "Doctors make mistakes," by Brian Goldman and react to its message based on posted questions in the forum.
- Read the article "How do surgeons make intraoperative decisions," by Flynn, Youngson and Yule and participate in the moderated online discussion.

**Week 4:**
Teamwork and collaboration

- Complete the assessment (including your OR team), "Operating Room Management and Attitudes Questionnaire."
- Share your assessment results and participate in the moderated online discussions based on the results.
- Watch the video, "Transitions of care," and participate in the discussions based on posted questions in the forum.

**Week 5:**
Professionalism

- Read the article summary, "Just culture," by Boysen and respond to the discussion based on a clinical case scenario.
- Watch the video, "Transparency, Compassion and Truth in Medical Errors," by Leilani Schweitzer and participate in the moderated online discussion.

**Week 6:**
Communication and expectations

- Watch the video, "Best Case/Worst Case (BC/WC) SURGEON Communication Tool," and apply the tool to a scenario you were faced with in your clinical practice.
- Share your learning outcomes so far and your expectations for the synchronous live event.
**Thursday**  
**December 3, 2020**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Moderator</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 minutes</td>
<td>Welcome and introduction</td>
<td>T Lund</td>
</tr>
</tbody>
</table>
| 80 minutes    | **Module 1**  
**Moderator: T Lund**  
**Leadership**  
Outline the agenda and purpose of the program  
• Plenary: Leadership in medicine (20 minutes)  
• Small group discussion (25 minutes)  
• Large group discussion and presentation of results (30 minutes)  
• Reflection (5 minutes)                      |           |
| 30 minutes    | Break                                                      |           |
| 80 minutes    | **Module 2**  
**Moderator: T Lund**  
**Situational awareness, decision making, critical thinking**  
• Plenary: understanding situational awareness (20 minutes)  
• Small group discussion (25 minutes)  
• Large group discussion and presentation of results (30 minutes)  
• Reflection (5 minutes)                      |           |
| 10 minutes    | Overall review of day 1                                    | T Lund    |
**Module 3**  
**Moderator: T Lund**  
**Teamwork and collaboration**

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| 80 minutes | • Plenary: productive interactions within a multiprofessional team (20 minutes)  
            • Small group discussion (25 minutes) based on the ORMAQ results from online preparations  
            • Large group discussion and presentation off results (30 minutes)  
            • Reflection (5 minutes) |
| 30 minutes | Break                                                                  |

**Module 4**  
**Moderator: T Lund**  
**Communication**

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| 80 minutes | • Plenary: it’s not about the nail! (30 minutes)  
            • Small group discussion (20 minutes)  
            • Large group discussion (25 minutes)  
            • Reflection (5 minutes) |
| 10 minutes | Overall review of day 2                                               | T Lund |
### Saturday
December 5, 2020

<table>
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<tr>
<th>Module 5</th>
<th>Moderator: T Lund</th>
<th>Professionalism</th>
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| 80 minutes | • Plenary: just culture in medicine (20 minutes)  
• Small group discussion (20 minutes)  
• Large group discussion (45 minutes)  
• Reflection (5 minutes) |
| 30 minutes | Break |

<table>
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<tr>
<th>Module 6</th>
<th>Moderator: T Lund</th>
<th>Wellness</th>
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| 80 minutes | • Plenary: stress, burnout and resilience (20 minutes)  
• Small group discussion (20 minutes)  
• Large group discussion (35 minutes)  
• Reflection (5 minutes) |
| 10 minutes | Overall review of day 3 | T Lund |
Online postcourse activities

Commitment to Change

Feedback (what went well / next time)

Discuss any outstanding issues

Follow-up self-assessments
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**Event organization**

**Participant management**

**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.

**Event information and logistics**

**Event organization compliance**

In certain countries where the 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.
General information

Event fee
AO Spine nonmember: CHF 1,110  
AO Spine member: CHF 965.70

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

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

Evaluation guidelines
All AO Spine 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 Spine 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 lectures, practical exercises, case discussions, or any event materials is strictly forbidden. Participants violating intellectual property will be dismissed.

The AO 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 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.

Event language
English
Sponsors

We thank our major industry partners, DePuy Synthes and Siemens, for contributing key in-kind support (materials and logistics), without which this event would not be possible, as well as an unrestricted educational grants for this event.
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 (www.advaMed.org)
- Mecomed Guidelines on Interactions with Healthcare Professionals (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.

5. Personnel
Industry staff members are not permitted to interfere with the educational content or engage in educational activities during the event.
AO Research Institute Davos (ARI)

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

AO Research Institute Davos (ARI)
In its work to further the AO mission, ARI's purpose is to advance patient care through innovative orthopedic research and development. Orthopedics concerns musculoskeletal, spine and craniomaxillofacial trauma, degenerative musculoskeletal diseases, infections, and congenital disorders.

Goals
- Contribute high-quality, applied preclinical research and development focused toward clinical applications/solutions.
- Investigate and improve the performance of surgical procedures, devices and substances.
- Foster a close relationship with the AO medical community, academic societies, and universities.
- Provide research environment/support/training for AO clinicians.

Meet with our team including our ARI Medical Research Fellows, establish contacts, freely discuss your clinical problems and ideas, and learn about the latest results from ARI.

Collaborative research programs
- Annulus fibrosus rupture
- Acute cartilage injury
- Osteochondral defect

Craniomaxillofacial
- Imaging and planning of surgery, computer aided preoperative planning
- Medication-related osteonecrosis of the jaw
- Bone regeneration and 3D printing

Spine
- Degeneration and regeneration of the intervertebral disc
- Biomarkers and patient outcomes

Trauma
- Bone infection, including the development and testing of active anti-infective interventions
- Sensing implants for objective monitoring of fracture healing
- Development of smart surgical tools
- New implant concepts for optimized bone healing
- Prediction of subject-specific risk of proximal humeral fixation failure via computational tools
- Development of generic Asian pelvic bone model
- Patient outcomes and biomarkers

Veterinary medicine
- Improving osteosynthesis for small and large animals

Multidisciplinary
- 3R principles: refinement of preclinical studies
- Bioreactor culture systems and mechanobiology
- Development, standardization, optimization, and improvement of preclinical models and methods
- Ex vivo testing using advanced biomechanical models
- Gene transfer: non-viral and viral
- Implant design using the finite element methods
- Implant positioning assistance, C-arm guided implant placement
- In-vivo and in-vitro quantification of bone turnover and scaffold degradation
- Medical additive manufacturing and biofabrication
- Medical computed tomography (CT) image processing and analysis
- Polymers to deliver cells and biological factors, create potential space for tissue development, and guide the process of tissue regeneration
- Prototype development and production
- Stem cell therapies for the treatment of bone, intervertebral disc, and cartilage defects

For the AO Research Institute Davos Activity Report 2019 and recent publications, go to www.aofoundation.org/ari/publications.
AO Spine membership
Join our global spine care community

Gain access to numerous privileges, including the most advanced educational programs, a worldwide network of professionals, and the highest quality of research carried out by experts and key opinion leaders in spine care.

www.aospine.org