PRELIMINARY Event program

AOCMF Masters Course—Facial Trauma, Challenges and Controversies

December 10–13, 2017, Davos, Switzerland

Lecture hall: Pischaparsenn
Mission

Our mission is to continuously set standards in postgraduate medical education and to foster the sharing of medically guided expertise in a worldwide network of healthcare professionals to improve patient care in trauma or disorders of the musculoskeletal system.

The AO Principles of fracture management

Fracture reduction and fixation to restore anatomical relationships.

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

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

Preservation of the blood supply to soft tissues and bone by gentle reduction techniques and careful handling.
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Welcome to AOCMF’s Masters Courses Davos 2017

Dear Colleagues,

On behalf of AOCMF and our international faculty, we would like to welcome you to the Davos Courses 2017—AO Foundation’s flagship event of the year—taking place from December 3–14. The AOCMF Masters Courses have been developed in response to the demand for more intense training for very experienced surgeons, and they provide access to the world’s leading experts in facial surgery across the specialties. Each course is limited to a maximum number of 32 surgeons, providing participants with a remarkable learning opportunity where you will debate cases in small groups, discuss problems, develop your skills, and hear the latest practices and evidence.

Develop your skills during the hands-on practical exercises on human anatomical specimens. Designed to address the latest techniques and surgical best practices, these AOCMF Masters Courses enable you to expand your knowledge and build upon your clinical expertise in an extraordinary learning environment.

AOCMF Davos Courses: 10–13 December, 2017

• AOCMF Masters Course—Facial Trauma, Challenges and Controversies
• AOCMF Masters Course—Orthognathic Surgery, Challenges and Controversies
• AOCMF Masters Course—Soft Tissue Reconstruction, Improving Functional and Aesthetic Outcomes

In addition to these exceptional courses, the Davos Courses 2017 provide numerous opportunities to share knowledge, and to network and connect with friends and colleagues. You can also visit the AO Center showcasing all research and clinical division activities across the entire AO Foundation. You can also become an official member of the AO network, which is one of the most extensive networks of more than 19,000 surgeons practicing, teaching, researching, and learning worldwide with the ultimate goal of improving patient care.

We wish you an outstanding experience at the AOCMF Masters Courses 2017 in Davos.

Sincerely,

Stefano Fusetti

Max Heiland

Chairs, AOCMF Masters Courses 2017
Goal of the course

This AOCMF Masters Course focuses on state-of-the-art techniques and best practices at a master’s level. Emerging technologies will be introduced and clinical controversies will be addressed.

Target participants

This course is for certified surgeons with 5–10 years experience and doctors nearing the end of their training in surgery across the craniomaxillofacial specialties (including oral and maxillofacial surgery, ENT, head and neck, plastic, oculoplastics, ophthalmology, and neuro and general surgery). It is targeted at participants who want to improve their knowledge or specialization in the management of complex patient problems in the field of CMF.

Learning objectives

Upon completion of the course, the participant will be able to:

- Refine surgical approaches to the upper facial skeleton and condyle
- Define the advantages and limitations of surgical planning, navigation and intraoperative imaging with new technologies
- Identify strategies to minimize and manage complications in the orbit, midface, and condyle
- Identify the controversies and apply appropriate treatment and rehabilitation strategies

Course description

This three-day course focuses on state-of-the-art techniques and best practices at a master's level in facial trauma. Emerging technologies in planning and navigation and clinical controversies are addressed. Using human anatomical specimens, surgical access techniques and approaches to the upper facial skeleton and condyle are developed. Patient cases and outcomes are discussed with expert faculty in small group discussions.

This course is delivered using a combination of small group discussions, cases, exercises with human anatomical specimens or other simulation materials (when appropriate), and summary lectures. All activities are moderated by 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.
Course Chairs

Sami Alissa  Security forces Hospital, Riyadh, Saudi Arabia
Stefano Fusetti  Department of Maxillofacial Surgery, University of Padova, Padova, Italy

International Faculty

Peter Aquilina  University of Sydney, Sydney, Australia
Benedicta Beck-Broichsitter  University Medical Center Hamburg-Eppendorf, Hamburg, Germany
Daljit Dhariwal  John Radcliffe Hospital, Oxford, United Kingdom
Ufuk Emekli  Istanbul University, Istanbul Medical Faculty, Istanbul, Turkey
Alberto Rocha Pereira  Portuguese Armed Forces Hospital, Lisbon, Portugal
Guglielmo Ramieri  A.O.U. Città della Salute e della Scienza di Torino, Torino, Italy

Guest Faculty

Marcelo Figari  Hospital Italiano de Buenos Aires, Buenos Aires, Argentina
Gorman Louie  University of Alberta, Edmonton, Canada
Iain McVicar  Queens Medical Centre, Nottingham, United Kingdom
Irfan Shah  Armed Forces Institute of Dentistry, National University of Medical Sciences (NUMS), Islamabad, Pakistan

Guest Speaker

Daniel Buchbinder  Icahn School of Medicine at Mount Sinai, New York, USA
Florian Thieringer  University Hospital Basel, Basel, Switzerland
### Sunday, December 10, 2017

<table>
<thead>
<tr>
<th>TIME</th>
<th>AGENDA ITEM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Location: Congress Center, Davos</td>
</tr>
<tr>
<td>13:30-17:00</td>
<td>FACULTY PRECOURSE</td>
</tr>
<tr>
<td>15:00</td>
<td>Opening of the Congress Center</td>
</tr>
<tr>
<td>15:00–17:00</td>
<td>Registration of participants</td>
</tr>
<tr>
<td>17:00–18:00</td>
<td>Opening ceremony</td>
</tr>
<tr>
<td>18:00–19:00</td>
<td>FOUNDERS’ RECEPTION</td>
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### Monday, December 11, 2017

<table>
<thead>
<tr>
<th>TIME</th>
<th>AGENDA ITEM</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Location: Lecture room Pischa-Parsenn, Davos Congress Centre</td>
</tr>
<tr>
<td>08:00–08:15</td>
<td>Opening of the AOCMF Masters Courses (joint session for all three courses)</td>
</tr>
<tr>
<td></td>
<td>Stefano Fusetti, Max Heiland</td>
</tr>
<tr>
<td>08:15–08:45</td>
<td>Keynote: Alloplastic TMJ reconstruction (joint session for all three courses)</td>
</tr>
<tr>
<td></td>
<td>Guglielmo Ramieri</td>
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<tr>
<td></td>
<td>Breakout into the individual masters courses</td>
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<tr>
<td></td>
<td>Location: Lecture room Jakobshorn, Davos Congress Centre</td>
</tr>
<tr>
<td>09:00–09:15</td>
<td>Welcome address, introduction of the faculty, course objectives (Davos Hospital Lecture Room)</td>
</tr>
<tr>
<td></td>
<td>Sami Alissa, Stefano Fusetti                                                                 ---------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Module 1</strong></td>
<td>Planning, navigation, and intraoperative imaging</td>
</tr>
<tr>
<td><strong>Moderators: Sami Alissa, Stefano Fusetti</strong></td>
<td></td>
</tr>
<tr>
<td>09:45–10:15</td>
<td>Planning, intraoperative navigation and intraoperative imaging –demonstration</td>
</tr>
<tr>
<td></td>
<td>Benedicta Beck-Broichsitter                                                                  ---------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10:15–10:30</td>
<td>COFFEE BREAK                                                                                  ---------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10:35</td>
<td>Transfer to Davos Hospital (meeting point: main entrance Congress Center)</td>
</tr>
</tbody>
</table>
Location: Davos Hospital Laboratory

Module 2  Hands-on workshops with human anatomical specimens  
Practical Exercises: Surgical accesses

<table>
<thead>
<tr>
<th>TIME</th>
<th>AGENDA ITEM</th>
<th>WHO</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:45-11:00</td>
<td>Introduction and summary of practical exercises</td>
<td>Sami Alissa, Stefano Fusetti</td>
</tr>
<tr>
<td></td>
<td>Lower eyelid</td>
<td>Ufuk Emekli, Benedicta Beck-Broichsitter</td>
</tr>
<tr>
<td></td>
<td>Upper eyelid and coronal access</td>
<td>Daljit Dhariwal, Gorman Louie</td>
</tr>
<tr>
<td>13:00–14:00</td>
<td>LUNCH BREAK</td>
<td></td>
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<tr>
<td></td>
<td>Transnasal canthopexy</td>
<td>Peter Aquilina, Guglielmo Ramieri</td>
</tr>
<tr>
<td></td>
<td>Approaches to condyle</td>
<td>Irfan Shah, Alberto Rocha Pereira</td>
</tr>
<tr>
<td>17:30–17:45</td>
<td>Summary and end of Day 2</td>
<td>Sami Alissa, Stefano Fusetti</td>
</tr>
</tbody>
</table>

Tuesday, December 12, 2017

<table>
<thead>
<tr>
<th>TIME</th>
<th>AGENDA ITEM</th>
<th>WHO</th>
</tr>
</thead>
<tbody>
<tr>
<td>07:45–08:15</td>
<td>Keynote: 3D Printing in AOCMF Surgery</td>
<td>Florian Thieringer</td>
</tr>
<tr>
<td>08:15–08:30</td>
<td>AOCMF membership and AO World announcement</td>
<td>Warren Schubert</td>
</tr>
<tr>
<td>08:30–08:45</td>
<td>Group photograph</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>Transfer to individual masters courses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Location: Jakobshorn (all day)</td>
<td></td>
</tr>
<tr>
<td>Module 3</td>
<td>Orbit and NOE (nasoorbitoethmoidal)</td>
<td>Moderators: Guglielmo Ramieri, Irfan Shah</td>
</tr>
<tr>
<td>09:00–09:15</td>
<td>Management of postoperative ectropion</td>
<td>Sami Alissa</td>
</tr>
<tr>
<td>09:15–09:30</td>
<td>Introduction to plenary group discussion</td>
<td>Sami Alissa, Stefano Fusetti</td>
</tr>
<tr>
<td></td>
<td>(small groups on separate tables) on treatment planning</td>
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<tr>
<td>TIME</td>
<td>AGENDA ITEM</td>
<td>WHO</td>
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<td>---------------</td>
<td>------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>09:30–10:45</td>
<td>Plenary group discussion on separate tables</td>
<td>Marcelo Figari, Daljit Dhariwal</td>
</tr>
<tr>
<td></td>
<td>Case 1: Acute complex ZMC fracture</td>
<td>Sami Alissa, Alberto Rocha Pereira</td>
</tr>
<tr>
<td>10:45–11:15</td>
<td>COFFEE BREAK</td>
<td></td>
</tr>
<tr>
<td>11:15–13:00</td>
<td>Case 2: Malunion of ZMC fracture (with orbital floor component) with enophthalmos</td>
<td>Peter Aquilina, Iain McVicar</td>
</tr>
<tr>
<td>13:00–14:00</td>
<td>LUNCH BREAK</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Module 3</td>
<td></td>
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<tr>
<td></td>
<td>Orbit and NOE (nasoorbitoethmoidal) (Plenary group discussion on separate tables continued with all faculty)</td>
<td>Moderators: Marcelo Figari, Benedicta Beck-Broichsitter</td>
</tr>
<tr>
<td>14:00–15:30</td>
<td>Case 3: Acute NOE III</td>
<td>Daljit Dhariwal, Guglielmo Ramieri</td>
</tr>
<tr>
<td>15:30–16:00</td>
<td>COFFEE BREAK</td>
<td></td>
</tr>
<tr>
<td>16:00–17:30</td>
<td>Case 4: Treatment planning: secondary NOE deformity correction, lower lid complications</td>
<td>Gorman Louie, Ufuk Emekli</td>
</tr>
<tr>
<td>17:30–17:45</td>
<td>Summary and end of Day 2</td>
<td>Sami Alissa, Stefano Fusetti</td>
</tr>
</tbody>
</table>

**Wednesday, December 13, 2017**

<table>
<thead>
<tr>
<th>TIME</th>
<th>AGENDA ITEM</th>
<th>WHO</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00–08:30</td>
<td>Keynote: Computer planning (joint session for all three courses)</td>
<td>Daniel Buchbinder</td>
</tr>
<tr>
<td></td>
<td>Breakout to individual masters courses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Location: Lecture room Pisma-Parsenn, Davos Congress Centre</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Module 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Malocclusion (mandible, midface, pediatric, geriatrics)</td>
<td>Moderators: Marcelo Figari, Gorman Louie</td>
</tr>
<tr>
<td>08:45–09:00</td>
<td>Assessing and maintaining occlusion</td>
<td>Ufuk Emekli</td>
</tr>
<tr>
<td>09:00–09:20</td>
<td>Establishing occlusion in difficult cases</td>
<td>Guglielmo Ramieri</td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
<td>Speaker(s)</td>
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<td>--------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------</td>
</tr>
<tr>
<td>09:20–09:40</td>
<td>Assessing and maintaining occlusion in pediatric cases</td>
<td>Daljit Dhariwal</td>
</tr>
<tr>
<td>09:40–10:10</td>
<td>COFFEE BREAK</td>
<td></td>
</tr>
<tr>
<td>10:10–12:00</td>
<td>Breakout to individual 4 small groups for case discussions</td>
<td>Moderators: Iain McVicar, Alberto Rocha Pereira</td>
</tr>
<tr>
<td></td>
<td>Small group discussions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complex mandible cases</td>
<td>All faculty</td>
</tr>
<tr>
<td>12:00–13:00</td>
<td>LUNCH BREAK</td>
<td></td>
</tr>
<tr>
<td>13:00–13:30</td>
<td>Open vs closed treatment of the fractured condyle: head</td>
<td>Alberto Rocha Pereira</td>
</tr>
<tr>
<td>13:30–14:00</td>
<td>Open vs closed treatment of the fractured condyle: neck and subcondylar</td>
<td>Benedicta Beck-Broichsitter</td>
</tr>
<tr>
<td>14:00–14:30</td>
<td>Take home message: condyle fractures</td>
<td>Iain McVicar, Stefano Fusetti</td>
</tr>
<tr>
<td>14:30–15:00</td>
<td>COFFEE BREAK</td>
<td></td>
</tr>
<tr>
<td>15:00–16:30</td>
<td>Breakout to individual 4 small groups for case discussions</td>
<td>Moderators: Guglielmo Ramieri, Irfan Shah</td>
</tr>
<tr>
<td></td>
<td>Small group discussions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Panfacial Cases</td>
<td>All faculty</td>
</tr>
<tr>
<td>16:30–17:00</td>
<td>A case that taught me…</td>
<td>Marcelo Figari</td>
</tr>
<tr>
<td>17:00–17:30</td>
<td>Summary, Closing, Certificates</td>
<td>Sami Alissa, Stefano Fusetti</td>
</tr>
</tbody>
</table>
Event organization

AOCMF
Sarah Groves
Clavadelerstrasse 8
7270 Davos, Switzerland
Phone  +41 81 414 2552
Fax    +41 81 414 22 84
Email  sarah.groves@aocmf.org

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

Event fee
AOCMF Masters Course—Facial Trauma, Challenges and Controversies, CHF 3,600.00
Included in the event fee is the conference bag with documentation, coffee breaks, lunches, and AO World Night and course certificate.

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

Swiss CME Accreditation
Additionally an application has been made to the following Swiss society: Die Schweizer Chirurginnen and Chirurgen (SGC/SSC).

Course certificate
The course certificates will be available at the end of the event at the welcome desk.

Evaluation guidelines
All AOCMF events apply the same evaluation process, online (pre- and post-event evaluation) and on-site by paper and pencil questionnaires. This helps AOCMF to ensure that we continue 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. Check hazards and legal restrictions on www.aofoundation.org/legal.

→ Recording, photographing, or copying of 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 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
Security checks will be conducted 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, thefts or other risks.

Use of mobile phones
Use of mobile phones 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 aodavoscourses.org for a daily selection of pictures from the Davos Courses, the best from last year's courses, and a selection of photographs from the first ever AO Davos Courses.

Dress code
Davos: warm clothes and suitable shoes are advisable.
Event venues

**Congress Center Davos**
Talstrasse 49A
7270 Davos, Switzerland
Phone +41 81 414 62 00
Fax +41 81 414 62 29

**Wet Laboratory:**
Spital Davos
Promenade 4
7270 Davos Platz
Phone +41 81 414 88 88
Info@spitaldavos.ch

**General information**
Sunday 12:00–19:00
Monday to Wednesday 07:30–19:00

**AO World**
Sunday 15:00–17:00
Monday to Wednesday 09:00–17:00 (Tuesday –20:30)

**Industry exhibition**
Sunday 15:00–19:00
Monday to Wednesday 09:00–17:00 (Tuesday –18:00)
AO Foundation—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 surgeons from the AO network. All education is planned based on needs assessment data, designed and evaluated using concepts and evidence from the most current medical education research, and involving 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, USA (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 (with the exception of the AO Foundation and AO Clinical Division) 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

If case simulations are chosen as an educational method to educate skills, we only use technology approved by the AOTK System (AOTK)—a large independent group of volunteer surgeons developing and peer-reviewing new technology (more information about AOTK, its development and approval process can be found on the AO Foundation website: www.aofoundation.org).

5) Personnel

Industry staff is not allowed to interfere with the educational content or engage in educational activities during the event.
Business center

There are business center facilities in the Congress Center which are accessible to everybody.

Services
• Internet and e-mail access
• Printer access
• www.aotrauma.org
  AO Course website offering course-related information

Opening hours
30 minutes before the first course of the day starts until
30 minutes after the last course ends

Disclaimer
The use of your own computer in the business center network is inherently not secure. We strongly recommend that you take appropriate actions to protect your computer against unauthorized use or theft (eg, Firewall, VPN-Connection, VirusScanner). AO cannot be held responsible for any data loss or theft.
For further information or support please contact:
AO Foundation
Phone +41 81 414 28 70
E-mail it.support@aofoundation.org
Wireless network

How to connect to the AO Wireless LAN

• Open the Wireless Network Connection Window

• Choose the **AO Business** Network as shown in the print screen below and click on the **Connect** Button.

![Wireless Network Connection Window](image)

• Our "AO Business" Wireless Network requires a WPA network key:

**Network key:** aowireless

![Type the network security key](image)

• Then click on the **OK** Button.
Exhibitions

AO World
Visit the AO World in the main foyer, home to the AO Clinical Divisions, AO Institutes and the AO Foundation Initiatives. Here you can explore membership opportunities, browse our print and electronic publications and learn about groundbreaking activities within the AO. Discover research, development, fellowships, and other opportunities available to you by visiting all the booths in the AO World.

Industry exhibitors
Visit the exhibitions of our major industry partners DePuy Synthes and Siemens, who are also contributing in-kind support (material and logistics), and the other exhibitors: SYNBOHE, Ethicon, Carl Zeiss AG, Invibio, Victorinox, ICUC, and Moticon GmbH.

Media exhibitors
Lehmanns Media can be found at the entrance to the Congress Center.
AO Research Institute Davos (ARI)

Mission
Excellence in applied Preclinical Research and Development within trauma and disorders of the musculoskeletal system and translation of this knowledge to achieve more effective patient care worldwide.

Goals
- Contribute high quality applied Preclinical Research and Development focused towards 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.

At the AO World booths, meet with our team including our ARI Medical Research Fellows, establish contacts, freely discuss your clinical problems, ideas, and learn about the latest results from the AO Research Institute Davos (ARI). Insight into the AO Center will show our infrastructure under one roof and enable you to meet some of our research team.

Areas:

Collaborative Research Programs
- Annulus Fibrosus Rupture
- Acute Cartilage Injury

Craniomaxillofacial
- Imaging and planning of surgery, computer aided preoperative planning
- Medication-Related Osteonecrosis of the Jaw
- Bone Regeneration

Spine
- Degeneration and regeneration of the intervertebral disc
- Fracture fixation in osteoporotic bone

Trauma
- Bone infection, including the development and testing of active anti-infective interventions
- Fracture fixation in osteoporotic bone including intra-operative assessment of bone quality, augmentation techniques and prophylaxis
- Evaluation of the cortical and trabecular bone remodeling (with special regards to the porosity) in the proximal humerus and its impact on the fracture zones
- Development of smart surgical instruments and implant concepts for optimized bone healing
- Patient outcomes and biomarkers

Veterinary Medicine
- Improving osteosynthesis for small and large animals

Multidisciplinary
- Analysis of implant-specific functional anchorage with CT-technology
- Ex vivo testing using advanced biomechanical models
- In vivo studies using established or newly developed preclinical models
- Gene transfer- non-viral and viral
- Implant design using the Finite Element Methods
- Implant positioning assistance, C-arm guided implant placement
- Telemetric monitoring of bone healing
- In vivo and in vitro quantification of bone turnover and scaffold degradation
- Longitudinal analysis within in-vivo studies using CT-technology
- Medical 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
• Bioreactor culture systems and mechanobiology
• Surface modification of PEEK to improve tissue integration
• Thermosresponsive gel for delivery of antibiotics, stem cells, growth factors, transfected cells etc.
• 3R – refinement of preclinical studies
• Development, standardization, optimization and improvement of preclinical models and methods

For the 2016 AO Research Institute Davos activity report and recent publications go to:
www.aofoundation.org/ari/publications
Sponsors

We thank our major industry partners DePuy Synthes and Siemens for contributing in-kind support (material and logistics) without which this event would not be possible. A special thanks to DePuy Synthes and Siemens for providing an unrestricted educational grant for this event.

We also extend our thanks to the following co-sponsors (educational grants, in-kind support):

Credit Suisse
Synbone
Ethicon
Upcoming AO Events—Davos 2018

AO Courses—December 3–8, 2018
• AOTrauma Course—Basic Principles of Fracture Management
• AOTrauma Course—Advances Principles of Fracture Management
• AOTrauma Course—Advanced Principles of Fracture Management for Swiss Residents
• AOTrauma Masters Course—Current Concepts
• AOTrauma Course—Foot and Ankle
• AOTrauma Course—Pediatrics
• AOTrauma Masters Kurs
• AOREcon Course

AO Courses—December 10–14, 2018
• AOTrauma Course—Basic Principles of Fracture Management for Swiss Surgeons
• AOSpine Courses
• AOCMF Courses
• AONEuro Course
• AOVET Courses

List subject to changes. The final Davos courses list as well as worldwide courses lists will be available on www.aotrauma.org in January 2018.