Preliminary Program

AOCMF Masters Course—Challenges and Controversies in Oncology and Reconstruction

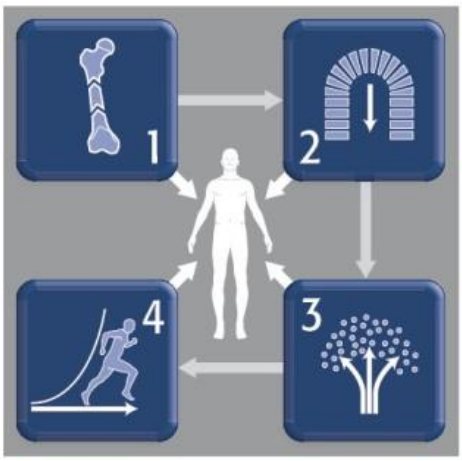
December 12-14, 2016, Davos, Switzerland

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.

Welcome

Welcome to the AOCMF Davos Courses 2016

Max Heiland

Satyesh Parmar

Welcome to AOCMF's NEW Masters Courses Davos 2016

Dear Colleagues,

On behalf of AOCMF and our international faculty, we would like to welcome you to the Davos Courses 2016—AO Foundation's flagship event of the year—taking place from December 4–15.
Join us for one of 3 brand new AOCMF Masters Courses. These 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 32-36 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, computer planning 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: 12–14 December, 2016

- AOCMF Masters Course—Challenges and Controversies in Facial Trauma
- AOCMF Masters Course—Challenges and Controversies in Oncology and Reconstruction
- AOCMF Masters Course—Challenges and Controversies in Orthognathic Surgery

In addition to these exceptional courses, the Davos Courses 2016 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 16,000 surgeons, operating room personnel, and scientists from over 100 countries.

We wish you an outstanding experience at the AOCMF Masters Courses 2016 in Davos.

Sincerely,
Satyesh Parmar, Chair, AOCMF Masters Courses 2016
Max Heiland, Chair, AOCMF Masters Courses 2016

Content

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.

In order to make the course a valuable learning experience for all, a good working knowledge of English is a prerequisite for participation.

Course objectives

After the course, participants should be able to:

- Follow the virtual planning for a mandibular resection
- Follow the virtual planning for a maxillary resection
- Follow the virtual planning for a composite fibula and iliac crest free flap
- Perform and refine surgical approaches to the composite fibula, scapula, and DCIA flaps
- Transplant a fibular flap to a mandibular defect in a bone model using a customized plate
- Transplant a DCIA flap to a maxillary defect in a bone model
- Define the advantages and limitations of surgical planning
- Recognize and develop a treatment plan for difficult and complex defects

Course description

This three-day course focuses on state-of-the-art techniques and best practices at a master's level in CMF oncology and reconstruction. New technologies in virtual planning and clinical controversies in flap reconstruction are addressed. Using human anatomical specimens, flap reconstruction techniques are developed. Treatment planning and flap surgery patient cases are discussed with expert faculty in small group discussions.

Chairpersons

Max Heiland	Department of Oral and Maxillofacial Surgery, University Medical Center Hamburg-Eppendorf , Hamburg, Germany
Satyesh Parmar	Maxillofacial Surgery, Queen Elizabeth Hospital, Birmingham, United Kingdom

Faculty International

Julio Acero	Oral and Maxillofacial Surgery, Associate Professor University of Alcala Ramon y Cajal / Puerta de Hierro University Hospitals, Madrid (Spain)
Marius Bredell,	Craniomaxillofacial and Oral Surgery, Clinic for Craniomaxillofacial and Oral Surgery, Zurich, Switzerland
Rui Fernandes	Oral & Maxillofacial Surgery, University of Florida College of Medicine - Jacksonville Florida, USA
Henning Hanken	Department of Oral- and Maxillofacial Surgery, University Medical Center Hamburg Eppendorf, Hamburg, Germany
Majeed Rana	Craniomaxillofacial Surgery, Hannover Medical School, Hannover, Germany

Guest Faculty

Scott Bartlett	Department of Plastic Surgery, University of Pennsylvania, Philadelphia, USA
Gregory Farwell	Head and Neck Oncology and Microvascular Surgery, University of California, Davis, Sacramento, USA
Bodil Lund	Department of Oral and Maxillofacial Surgery, Karolinska University Hospital, Stockholm, Sweden
Paul Manson	Department of Plastic Surgery, John Hopkins University, Baltimore, USA
Warren Schubert	Department of Plastic & Hand Surgery University of Minnesota, Regions Hospital, St Paul, Minnesota, USA

Table Instructor

Vojko Didanovic	Clinical Department of Maxillofacial and Oral Surgery,University Clinical Centre, Ljubljana, Slovenia
Florian Thieringer	Oral and Cranio-Maxillofacial Surgery, University Hospital Basel, Basel, Switzerland

Course organization

AO Foundation
AOCMF
Sarah Rosalind Groves
Clavadelerstrasse 8
7270 Davos, Switzerland
Phone +41 81 414 25 52
Fax +41 81 414 22 80
Email sarah.groves@aocmf.org

Sunday, December 11, 2016

TIME	AGENDA ITEM
15:00	Opening of the Congress Center
15:00–17:00	Registration of participants
17:00–18:00	Opening ceremony
18:00–19:00	FOUNDERS' RECEPTION

Monday, December 12, 2016

TIME	AGENDA ITEM	CONTRIBUTOR
08:00-08:15	Opening of the AOCMF Masters Courses (joint session for all three courses)	S Parmar, M Heiland
08:15-08:45	Keynote: Facial soft tissue injuries (joint session for all three courses)	E Ellis
	Breakout to individual masters course	
09:00	Welcome address, introduction of the faculty, course objectives	M Heiland, S Parmar
Module 1	**Computer-assisted and virtual planning in CMF reconstruction**	**Moderator: M Heiland**
09:15-09:45	Computer assisted planning in CMF surgery	M Rana
09:45-10:05	Raising of microvascular free flaps after virtual planning	H Hanken
10:05-10:45	Microsurgical techniques	S Parmar
10:45-11:00	COFFEE BREAK	
11:00-11:15	Introduction of the workflow for computer-assisted planning:	H Hanken
11:15-12:15	Demonstration of virtual planning of a mandibular resection, cutting guides and individual implant for fibula	Materialise
12:15-13:00	LUNCH BREAK	

13.00-13.45	'Meet the expert': New frontiers in orthognathic surgery: 3D-printed titanium plates (joint session for all three courses)	S Bartlett
Module 2	**The anatomy and techniques of flap harvesting**	**Moderator: S Parmar**
14:00-14:45	The Anatomy and harvesting of the fibula	R Fernandes
14:45-15:30	The anatomy and harvesting of the DCIA (Deep Circumflex Iliac Artery Flap)	J Acero
15:30-16:15	The Anatomy and harvesting of a compound flap based on the subscapular vessels	M Bredell
16:15-16:30	COFFEE BREAK	
16:30-17:00	Pros and cons of primary versus secondary reconstruction	M Heiland
17:00-17:10	Evaluation and wrap up and end of Day 1	M Heiland, S Parmar

Tuesday, December 13, 2016

TIME	AGENDA ITEM	CONTRIBUTOR
08:00-08:30	Keynote: The use of antibiotics in craniomaxillofacial surgery (joint session for all three courses)	B Lund
08:30-08:45	AOCMF membership and AO World announcement	W Schubert
	Breakout to individual masters course	
08:55	**Transfer to hospital (meeting point: main entrance Congress Center)**	
Module 3	**Hands on workshops with human anatomical specimens**	**Table instructors: V Didanovic F Thieringer**
09:30-12:00	Hospital: Practical Exercise 1 Harvesting of an osteocutaneous fibula flap and reconstruction of a segmental defect in a bone model with guides and a patient-specific plate	R Fernandes
12:00-13:00	LUNCH BREAK	

13:00-15:30	Hospital: Practical Exercise 2 Harvesting of the DCIA flap, reconstruction of a midfacial defect in a bone model with guides and matrix midface plates Maxillary segmental defect reconstruction	J Acero
15:30-16:00	COFFEE BREAK	
16:00-18:30	Hospital Practical Exercise 3 Harvesting of a compound flap based on the subscapular vessels	M Bredell
18:30-18.40	Evaluation and wrap up of Day 2	M Heiland S Parmar
18:40	**Transfer to Congress Center**	
18:30-21:00	AO World Night at the Congress Center—a social get together	

Wednesday, December 14, 2016

TIME	AGENDA ITEM	CONTRIBUTOR
08:00-08:30	Keynote: Ballistic Wounds (joint session for all three courses)	P Manson
	Breakout to individual masters course	
Module 4	**Microsurgical free flaps and CMF Reconstruction**	**Moderator: M Bredell**
08:45-09:15	Mandible reconstruction using microsurgical free flaps	G Farwell
09:15-09:45	Midface reconstruction using microsurgical free flaps	S Parmar
09:45-10:15	The future of individual implants	M Rana
10:15-10:45	COFFEE BREAK	
Module 5	**Panel discussion: Controversies in the Reconstruction of Maxillary defects**	**Moderator: M Heiland**
10:45 – 12:15	Panel discussion	Panel: S Parmar R Fernandes G Farwell M Bredell H Hanken

12:15 – 13.15	Lunch break	
Module 6	**Patient case discussions on state of the art free flap surgery**	**Moderators: All Faculty**
13:15-13:30	Introduction of small group discussions	M Heiland
13:30-15:30	Breakout into 4 small groups	
13:30 -15:30	Case Discussion: State of the Art in free flap surgery: Dealing with the donor site	M Heiland, M Rana
13:30 -15:30	Case Discussion: State of the Art in free flap surgery: Second choice in failure	S Parmar, V Didanovic
13:30 -15:30	Case Discussion: State of the Art in free flap surgery: Postoperative Monitoring	G Farwell R Fernandes
13:30 -15:30	Case Discussion: State of the Art in free flap surgery: Solving the vessel depleted neck	M Bredell, H Hanken
15:30 – 16:00	COFFEE BREAK	
16:00-16:30	Free flaps in gunshot injuries	G Farwell
16:30-17:00	Wrap up, closing remarks, evaluation, certificates	M Heiland S Parmar
17:00	End of course	

Course information

Course fee
AOCMF Masters Course—Challenges and Controversies in Oncology and Reconstruction CHF 4200.00
Included in the course fee are conference bag with documentation, coffee breaks, lunches, and AO World Night.
Registration http://davos1216_mastersor.aocmf.org/

European CME Accreditation
An application has been made to the UEMS-EACCME® in Brussels for European CME credits (ECMEC).

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

Evaluation guidelines
All AOTrauma courses apply the same evaluation process with paper and pencil questionnaires. This will help AOTrauma to ensure that we continue to meet your training needs.

Intellectual property
Course materials, presentations, and case studies are the intellectual property of the course 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 course 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 course 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 2015, 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.

Hotels
Participants who have not booked a package including hotel should settle their hotel bill directly when checking out.

Course 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
CH-7270 Davos Platz, Switzerland
Phone +41 81 414 88 88
Fax +41 81 414 84 28
Email 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

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

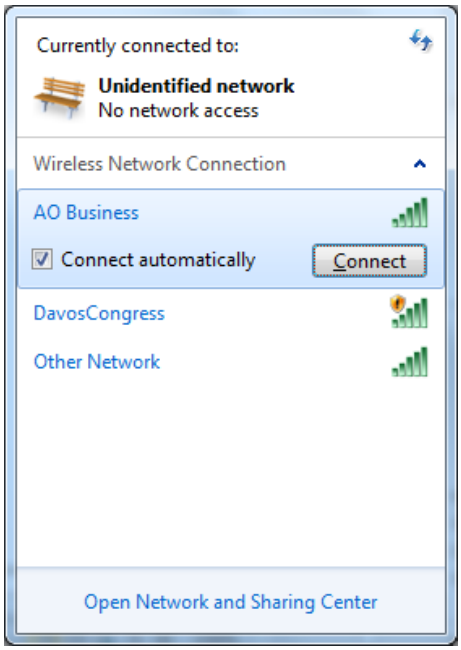
Opening hours
30 minutes before the first course of the day starts until
30 minutes after the last course ends

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

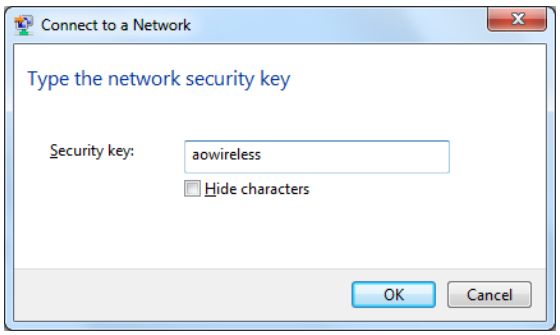
How to connect to the AO Wireless LAN

- Open the Wireless Network Connection Window
- Choose the **AO Business** Network as shown in the print screen below and click on the **Connect** Button.



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

  Network key: **aowireless**



- 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 our industry partner DePuy Synthes and other exhibitors: Invibio, HECTEC, Moticon, OPED, Siemens, SYNBONE, and ZEISS in the lower foyer. Lehmans 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
- Bisphosphonate-Related Osteonecrosis of the Jaw

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

Veterinary Medicine
- Improving osteosynthesis for small 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
- Standardization, optimization and improvement of preclinical methods and models

For the 2015 AO Research Institute Davos activity report and recent publications go to:
www.aofoundation.org/ari/publications

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: SYNBONE, ZEISS, Invibio, HECTEC, OPED, Victorinox and Moticon. -> further exhibitors to be confirmed (pending).

Media exhibitors
Lehmans Media can be found at the entrance to the Congress Center.

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 for providing an unrestricted educational grant for this event.

(Logos)
We also extend our thanks to the following co-sponsors: Credit Suisse, SYNBONE.

(Logos)

Upcoming AO Courses—Davos 2017

AO Courses— December 3–8, 2017
- 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—Management of Fractures of the Hand and Wrist
- AOTrauma Course—Pelvic and Acetabular Fractures Management
- AOTrauma Masters Kurs
- AORecon Courses

AO Courses—December 10–14, 2017
- AOTrauma Course—Basic Principles of Fracture Management for Swiss Surgeons
- AOSpine Courses
- AOCMF Courses
- AONeuro Courses
- AOVET Courses

List subject to changes. The final Davos courses list as well as worldwide courses lists will be available on www.aocmf.org in January 2017.