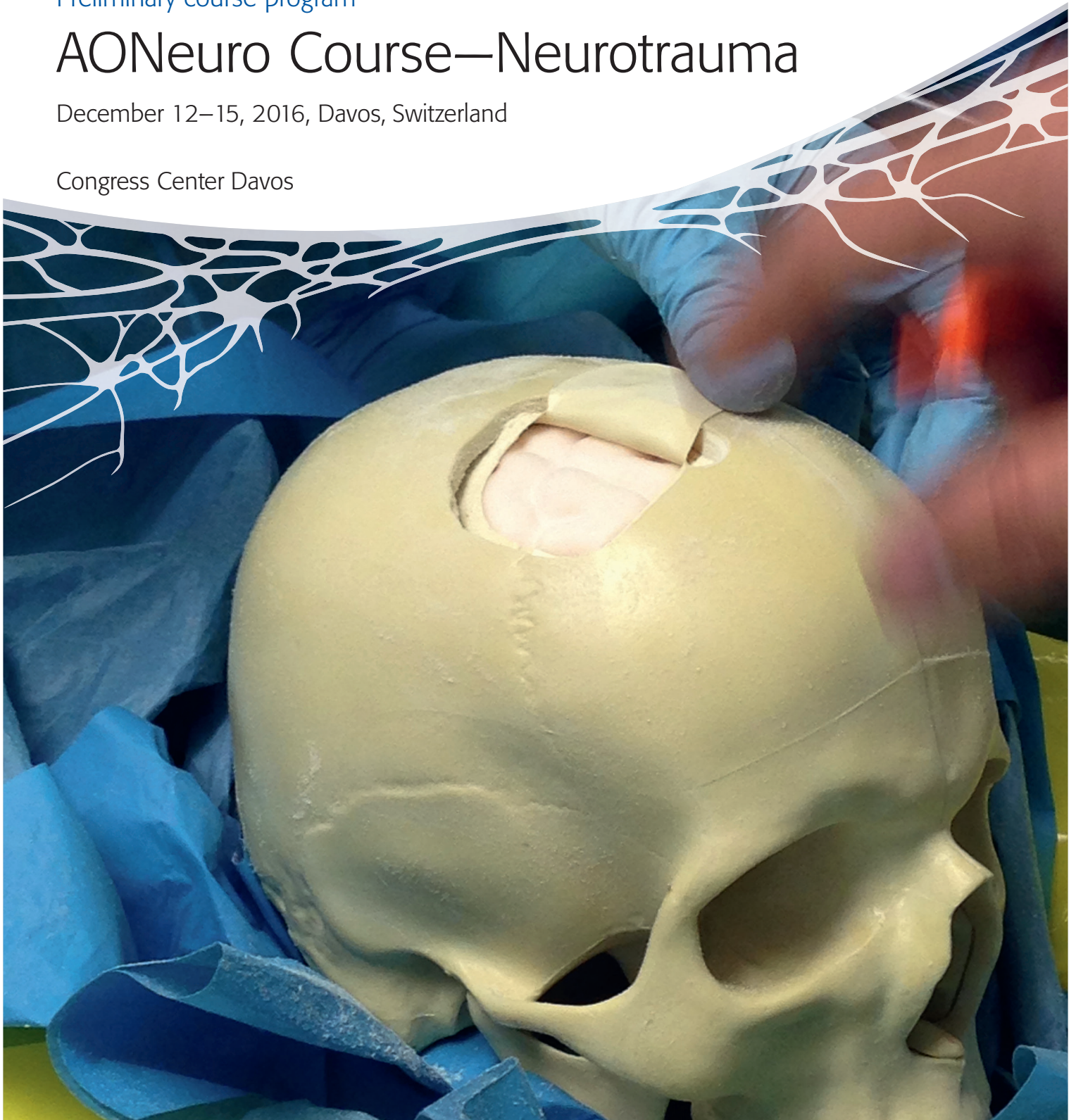


Preliminary course program

AONeuro Course—Neurotrauma

December 12–15, 2016, Davos, Switzerland

Congress Center Davos



The first AO Course was held in Davos in 1960—these early courses pioneered psychomotor techniques by teaching practical skills of AO Techniques. Since those early days over 250,000 surgeons and 135,000 ORP staff from over 110 countries have attended AO Courses.

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Welcome

On behalf of the AO Foundation and your AONEuro faculty, it is my pleasure to welcome you to this neurotrauma educational event!

Through its major focus on education, the AO Foundation brings educational excellence to over 46,000 surgeons at 750 AO events worldwide each year.

As part of the AO Foundation, AONEuro serves as a worldwide, multi-specialty community of cranial neurosurgeons, neurologists, neurointensivists, and neurology-related professionals who are committed to improving neuro patient outcomes.

AONEuro's educational offering focuses on Traumatic Brain Injury, Skull Base Surgery, and Cerebrovascular Surgery.

To enhance the effectiveness of our programs, we cooperate with regional, national, and international neurosurgical organizations, as well as with our AOSpine and AOCCMF colleagues. This way, we can bring you the latest developments in the treatment of brain, facial, spinal cord trauma, and congenital anomalies.

Our case-based learning approach, together with practical skill training in the laboratory, enables you to develop your skills using the newest equipment, along with the latest scientific knowledge.

After this course concludes, please visit our website, www.aoneuro.org, where you can sign-up for our newsletter, find additional educational materials, and learn about upcoming educational activities.

We thank you for your participation and wish you a successful AONEuro course experience.

Yours sincerely,



Paul N Manson

AO Board of Directors appointed Coordinator for AONEuro

Goal of the course

The AONeuro Course—Neurotrauma covers the theoretical basis and practical principles for managing neurotrauma, addressing complications, and performing state-of-the-art reconstructive surgery.

Target participants

The course has been developed for residents and certified surgeons that manage neurotrauma and reconstruction and who have a strong interest in these fields. It focuses on interdisciplinary care and is appropriate for neurosurgeons, CMF, ENT, trauma, and other surgeons.

Course objectives

Upon completion of this course, participants should be able to:

- Apply current classification systems and guidelines in neurotrauma
- Manage neurotrauma and skull base fractures in adult, pediatric, and polytrauma patients
- Conduct advanced neuromonitoring
- Plan and perform appropriate operative treatment (eg, decompressive craniotomy, complex cranial reconstruction)
- Manage cerebrospinal fluid leaks and other complications and perform dural repairs.

Course description

This course covers the current best strategies and considerations for managing neurotrauma patients. It features an international faculty of experts and is based on the competencies defined in AONeuro's new neurotrauma curriculum.

The course content is delivered using multiple educational methods. Comprehensive lectures—including a special lecture in 3-D—concentrate on the understanding of core material. Interactive case presentations further deepen this knowledge and facilitate the discussion in trauma management. Newly developed practical exercises enable participants to apply AO principles in the management of common injuries. Case-based discussions link the lecture material and practical skills with the clinical problems commonly encountered in everyday practice.

Chairpersons



Francesco Birolì
Bergamo, Italy



Anthony Figaji
Cape Town, South Africa

International Faculty

Andres Rubiano
Ross Bullock
Se-Hyuk Kim
Paul Manson
Shelly Timmons
Stephen Lewis
Wai Poon

Neiva (Huila), Colombia
Miami, USA
Suwon, Korea South
Baltimore, USA
Hershey, USA
Perth, Australia
Hong Kong, China

Regional Faculty

Angelo Pompucci
Aurelia Peraud
Christian Matula

Rome, Italy
Munich, Germany
Vienna, Austria

Special Guests

Franco Servadei
Giuseppe Citerio

Parma, Italy
Monza, Italy

Course organization

AONeuro

Tamara Schönauer
Clavadelstrasse 8
7270 Davos, Switzerland
Phone +41 81 414 25 53
Fax +41 81 414 22 80
Email info@aoneuro.org
www.aoneuro.org

Public Viewing: AONeuro Webinar—Cranioplasty

Monday, December 12, 2016

Lecture room "Schwarzhorn"

01:00-01:15 pm Central European Time (GMT +1)

Description

This webinar presents the current best strategies and considerations for cranioplasty. It includes discussions on different technical options, complications, outcomes, and economic issues.

The webinar has five parts:

- Welcome and introduction (Christian Matula)
- Options and solutions (Anthony Figaji)
- Complications (Francesco Biroli)
- Economics and results (Andres Rubiano)
- Wrap up and take home message (Christian Matula)

Target audience

This webinar has been developed for residents and surgeons in neurosurgery, trained neurosurgeons, neurointensivists, neurorehabilitation specialists, trauma teams, and traumatologists.

Objectives

Upon completion of the webinar, participants will be able to:

- Describe the different surgical options and solutions for cranioplasty
- Recognize the potential complications of this procedure
- Discuss outcomes and economic issues related to cranioplasty

Agenda

TIME	AGENDA ITEM	WHO
13:00–13:05	Webinar: Cranioplasty Welcome and introduction by the moderators	Moderator: C Matula
13:05–13:20	Options and solutions	T Figaji
13:20–13:35	Complications	F Biroli
13:35–13:50	Economics and results	A Rubiano
13:50–14:00	Wrap-up and take-home messages	C Matula

Tuesday, December 13, 2016

TIME	AGENDA ITEM	WHO
11:00–13:00	Registration	
13:00–13:05	Welcome and course objectives	A Figaji, F Biroli
13:05–13:10	Module 1: Basics of Neurotrauma Introduction by the moderator	Moderator: A Figaji
13:10–13:30	Neurotrauma pathophysiology and epidemiology	C Matula
13:30–14:10	Neurotrauma related anatomy in 3D	S Lewis
14:10–14:30	COFFEE BREAK	
14:30–14:35	Module 2: Diagnostics and monitoring Introduction by the moderator	Moderator: C Matula
14:35–14:55	Use of advanced imaging in traumatic brain injury (TBI) diagnosis and prognosis	R Bullock
14:55–15:15	Evaluation of brain swelling, brain perfusion and hematoma volume	A Figaji
15:15–15:35	Neuromonitoring—present and future	G Citerio
15:35–16:05	ICP monitoring—pros and cons	R Bullock
16:05–17:05	Interactive case presentation and discussion <ul style="list-style-type: none"> • Case of multimodal diagnostic and monitoring of ICP • Case of misinterpretation of ICP data and imaging • Case of nonsurgical management 	All faculty
17:05–17:25	AONeuro history and structure	P Manson
17:25–17:30	Evaluation and wrap-up of Day 1	A Figaji, F Biroli

Wednesday, December 14, 2016

TIME	AGENDA ITEM	WHO
08:00–08:05	Module 3: Treatment Introduction by the moderator	Moderator: S Timmons
08:05–08:25	Nonoperative treatment in TBI	G Citerio
08:25–08:45	Operative treatment in TBI	S Timmons
08:45–09:05	The dilemma of decompressive craniectomy	S Lewis
09:05–09:25	Skull base trauma and CSF leak management	C Matula
09:25–09:45	TBI in pediatric patients	A Peraud
09:45–10:05	TBI in elderly patients	W Poon
10:05–10:25	COFFEE BREAK	
10:25–12:30	Hands on and practical exercise Workshop on: <ul style="list-style-type: none"> • Decompressive craniectomy • Posterior fossa decompression • Handling of the dura • Reconstruction 	All faculty
12:30–13:30	LUNCH	
13:30–15:00	Hands on and practical exercise Workshop on: <ul style="list-style-type: none"> • ICP bolt positioning • Simulation and computer assisted training 	All faculty
15:00–16:00	Interactive case presentation and discussion <ul style="list-style-type: none"> • Surgical management case (decompressive craniectomy) • Skull Base Trauma case • Pediatric case 	All faculty
16:00–16:30	COFFEE BREAK	
16:30–16:35	Module 4: Complications Introduction by the moderator	Moderator: A Peraud
16:35–16:55	Complications after cranioplasty	F Biroli
16:55–17:05	Anticoagulation in TBI patients	S-H Kim
17:05–17:35	Postrumatic hydrocephalus	A Pompucci
17:35–17:55	Interactive case presentation and discussion <ul style="list-style-type: none"> • Complications—posttraumatic abscess 	

17:55–18:00 Evaluation and wrap-up of Day 2

A Figaji,
F Biroli

Thursday, December 15, 2016

TIME	AGENDA ITEM	WHO
08:00–08:05	Module 5: Special interests Introduction by the moderator	Moderator: R Bullock
08:05–08:25	TBI and sports	S Lewis
08:25–08:45	Avoidable mortalities in TBI	W Poon
08:45–09:05	Outcome in TBI	F Biroli
09:05–09:25	Neurovascular Trauma	S Lewis
09:25–09:45	Managing TBI in low income countries—what are the priorities?	A Rubiano
09:45–10:05	Neurotrauma guidelines	F Servadei
10:05–10:45	Interactive case presentation and discussion <ul style="list-style-type: none"> • Vascular trauma • TBI and sports 	All faculty
10:45–11:05	COFFEE BREAK	
11:05–11:10	Module 6: Clinical trials Introduction by the moderator	Moderator: F Biroli
11:10–11:30	The good, the bad and the ugly of clinical trials in TBI	S Timmons
11:30–11:50	The secret of Track-TBI	R Bullock
11:50–12:10	How to become involved in a TBI trial?	C Matula
12:10–12:15	Evaluation and closing of the course Distribution of certificates	A Figaji, F Biroli

Course information

Course fee

AONeuro—Neurotrauma CHF 1,700

Included in course fee are conference bag with documentation, coffee breaks, lunches and a reception.

CME Accreditation

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

Evaluation guidelines

All AONeuro courses apply the same evaluation process, either audience response system (ARS) or paper and pencil questionnaires. This will help AONeuro 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, practical exercises, and group discussions.

No insurance

The course organization does not take out insurance to cover any individual against accidents, theft, 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 aodavocourses.org for a daily selection of pictures from the Davos Courses 2016, the best from last year's courses, and a selection of photographs from the first ever AO Davos Course.

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 venue

Congress Center Davos

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

General information

Sunday	12:00–19:00
Monday to Thursday	07:30–19:00
Friday	07:30–18:00

AO World

Sunday	15:00–19:00
Monday to Friday	09:00–17:00 (Thursday -20:30)

Industry exhibition

Sunday	15:00–19:00
Monday to Friday	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

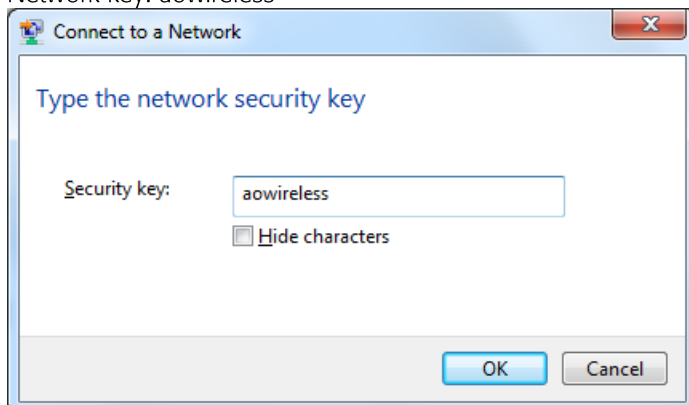
Wireless network

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 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.

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
- Thermoresponsive 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

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.

We also extend our thanks to the following co-sponsors:

Credit Suisse
SYNBONE

Upcoming AO Courses—Davos 2016

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
- AO CMF 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.aoneuro.org in January 2017.



AONeuro Educational Activities 2016

SA	AONeuro Course—Neurotrauma	Jan 30–31	Capetown, South Africa
AP	AONeuro Symposium—Traumatic Brain Injury	Feb 20	Suwon, Korea South
AP	AONeuro Symposium—Neurotrauma	Feb 28	Sendai, Japan
EU	AONeuro Course—Neurotrauma	Apr 12–14	Pacengo di Lazise, Italy
AP	AONeuro Symposium—Neurotrauma	Apr 21	Changsha, China
LA	AONeuro Symposium—Neurotrauma	May 27–28	Lima, Peru
AP	AONeuro Course—Neurotrauma	May 27–29	Mumbai, India
AP	AONeuro Lecture—Skull Base	Jun 14	Osaka, Japan
LA	AONeuro Course—Neurotrauma	Jun 17–18	Sao Paulo, Brazil
AP	AONeuro Course—Skull Base Micro Dissection	Jul 1–3	Bangkok, Thailand
EU	AONeuro Course—Neurotrauma	Jul 14–15	Murnau, Germany
NA	AONeuro Course—Neurotrauma and Critical Care	Oct 1–2	Philadelphia, USA
EU	AONeuro Course—Skull Base Dissection incl. Symposium on Skull Base Trauma	Oct 17–20	Vienna, Austria
NA	AONeuro Course—Advanced Skull Base and Cerebrovascular Surgery Approaches	Oct 21–23	Miami, USA
NA	AONeuro Course—Pediatric Neurotrauma	Nov 18–19	Phoenix, USA
LA	AONeuro Course—Neurotrauma	Dec 8	Bogota, Colombia
<i>Global</i>	AONeuro Webinar—Cranioplasty	Dec 12	Davos, Switzerland
<i>Global</i>	AONeuro Course—Neurotrauma	Dec 13–15	Davos, Switzerland

AP Asia Pacific **EU** Europe **LA** Latin America **NA** North America **SA** South Africa



Event Dates are subject to change,
please check the AONeuro website
for latest information
<http://tiny.cc/e7189x>

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<http://tiny.cc/27189x>



Visit the AONeuro
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www.aoneuro.org

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