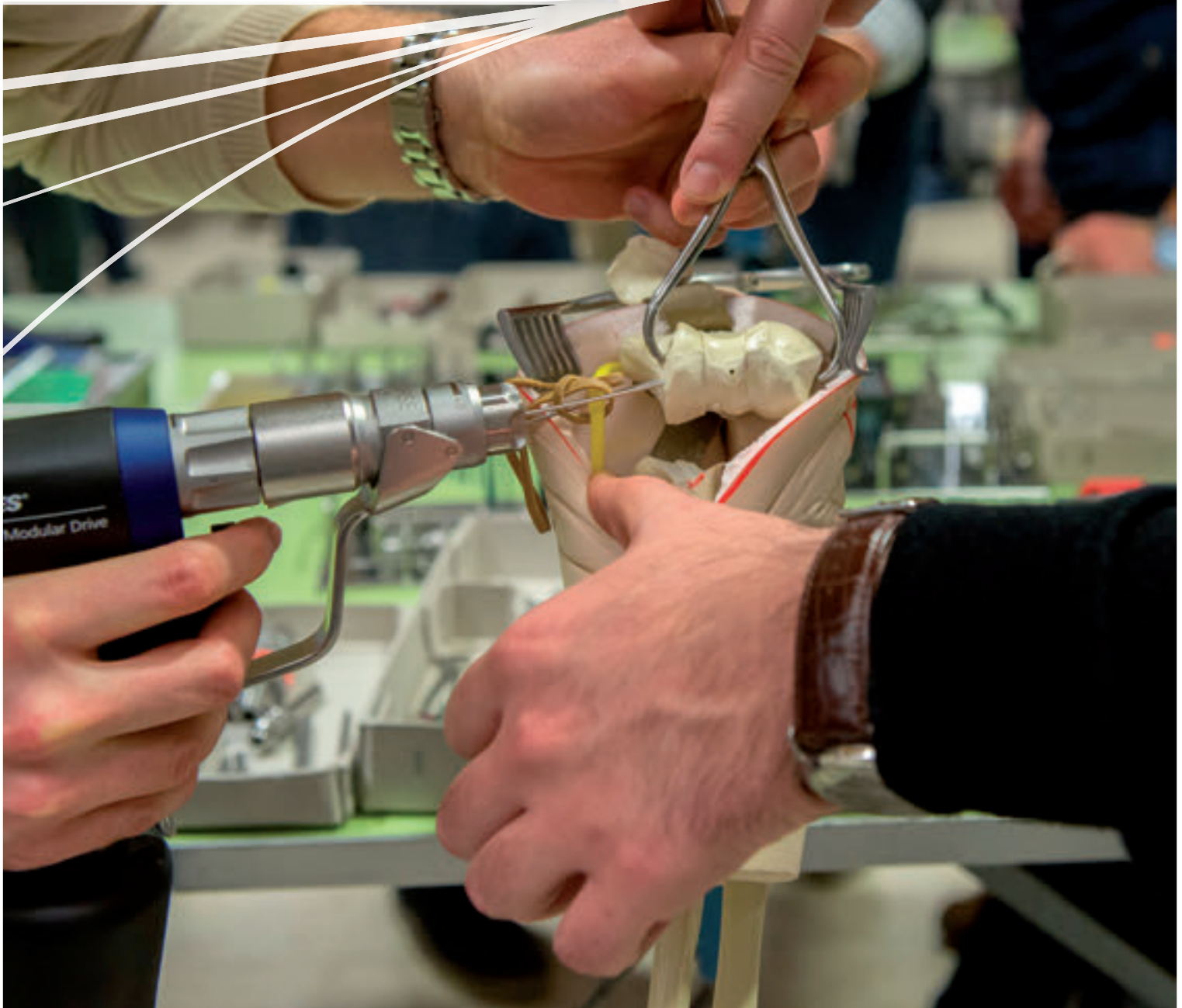


Program

AOTrauma Course—Basic Principles of Fracture Management

February 10–12, 2016 Szeged, Hungary



Value statement

AOTrauma is committed to improve patient care outcomes through the highest quality education. We strive to combine the right knowledge and surgical skills that empower the orthopedic and trauma surgeons to put theory into practice and to improve fracture management for the benefit of the patient.

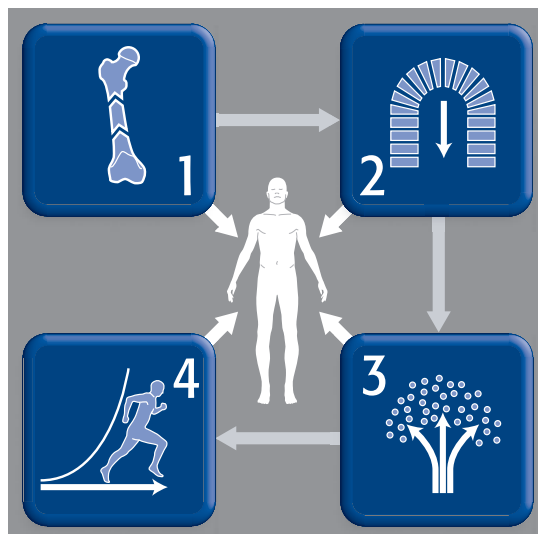
7 Principles of Education

- 1 Based on needs
- 2 Motivates to learn
- 3 Relevant
- 4 Interactive
- 5 Provides feedback
- 6 Promotes reflection
- 7 Leads to verifiable outcomes

The AO principles of fracture management

Fracture reduction and fixation to restore anatomical relationships.

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



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

Preservation of the blood supply to soft tissues and bone by gentle reduction techniques and careful handling.

Dear course participants,

Welcome to the AOTrauma Course—Basic Principles of Fracture management, which is planned and delivered to meet your needs using a competency-based curriculum approach and the AO's seven principles for high-quality education.

AO Trauma's innovative approach to education has been further strengthened as a result of the successful collaboration with the AO Education Institute in the application of state-of-the-art educational concepts in curriculum planning and all faculty development programs.

This course is one of our many educational activities for providing lifelong learning, from the Residents Education Program through to specialized Continuing Professional Development (CPD) for practicing surgeons and clinicians.

We believe that your active engagement in this course will result in improved care for your patients. Your current level of knowledge and skills will be challenged by the activities and throughout the entire event. We are confident that the combination of education principles and relevant content from our curriculum, as well as your interaction with colleagues and expert faculty will provide an effective learning experience that meets your needs.

This course is part of an overall competency-based educational program that includes many other activities and resources for self-directed learning. The educational activities in each program are developed by an international taskforce of clinical experts and educationalists and made available to you through the Education section of www.aotrauma.org.

We hope you enjoy the course and benefit from the networking opportunities it provides for you to share experiences with your colleagues.



Kodi Kojima
Chairperson AOTrauma
Education Commission



John (Jack) Wilber
Chairperson AOTrauma
International Board

If you enjoy the experience during your course and would like to stay in touch with the organization and its international network of surgeons, we invite you to become a member of AOTrauma. The benefits of membership, including options to get involved in new opportunities that advance trauma care are described at www.aotrauma.org.

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Goal of the course

The AOTrauma Course—Basic Principles of Fracture Management teaches fundamental principles and current concepts in the treatment of injuries, incorporating the latest techniques in operative fracture management. The AOTrauma Basic Principles course is the initial step along the path of lifelong learning in the area of operative fracture management. This course mainly focuses on the basic principles of fracture management.

Target participants

The AOTrauma Course—Basic Principles of Fracture Management is targeted at physicians in surgical training but is also open to anyone else who is interested in furthering their knowledge and skills in operative fracture management.

Course objectives

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

- Discuss the concepts of stability, their influence on bone healing, and how to apply implants to achieve appropriate stability
- Plan a treatment based on assessment, imaging, classification, and decision making
- Apply reduction techniques in fracture management with attention to the importance of the soft tissues
- Treat diaphyseal and simple (peri)articular fractures using different application techniques
- Evaluate and recognize the special problems related to fractures in the immature skeleton, pelvic injuries, osteoporotic fractures, postoperative infection, delayed union and/or nonunion
- Plan the initial treatment of the polytraumatized patient

Course description

Online precourse self-assessment prepares participants for the course and allows the faculty to tailor the course to the needs of the participants. Before attending the course, participants are expected to complete online modules on bone healing and classification.

The course contains several evidence-based lectures, which cover the key information required. The AO Skills Lab engages participants in hands-on learning of basic principles and practical know-how needed for live surgery. With experiences such as proper tightening of a screw and feeling the difference between drilling with sharp and blunt drill bits, participants gain important surgical skills and learn about basic biomechanical concepts in a safe, instructive environment. In practical exercises participants will be trained in the application of fixation techniques. Discussing cases in small groups helps participants to understand decision-making and management skills.

Elnöki köszöntő



Kedves Kolléganők és Kollégák!

Megtisztelő feladat számomra, hogy az AO Bázis kurzus elnökeként köszönhetek mindenkit Szegeden.

Az AO (Arbeitsgemeinschaft für Osteosynthesefragen) Svájcban alakult meg közel 60 évvel ezelőtt és célja az volt és maradt, hogy javítsa a traumatológiai, ortopédiai betegek ellátásának minőségét. Sikeressége miatt világszerte elterjedt és Magyarországról is több mint 50 tagja van. Az AO magyar képviselői évente rendszeresen postgradualis kurzusokat, szemináriumokat, továbbképzéseket tartanak a magyar és a szomszédos országok baleseti- és ortopéd sebészeinek, gerinc- és maxillofacialis sebészeinek, valamint műtős szakasszisztenseinek. Az AO magyarországi vezetése rendszeresen delegál tehetséges tagokat a nemzetközi ún. „Faculty Training-re” és „Chairman Education Programra,” melyet az AO Foundation szervez.

Különösen nagy öröm számomra, hogy ebben az évben szülővárosom, Szeged ad otthont annak az AO Bázis kurzusnak, amely az ATLS kurzussal együtt 2013. januárja óta kötelező minden újonnan belépő hazai ortopéd-trauma rezidensnek. A bázis kurzus az első lépés arra, hogy teljesítésével mindenki előtt megnyíljon az a kivételes lehetőség, hogy elméleti és gyakorlati képességeit fejlesztve, a kor követelményeinek megfelelő színvonalon legyen képes ellátni betegeit és, hogy aktív tagja legyen az AOTrauma új köntösbe öltöztetett magyarországi munkacsoportjának.

A 2016. évben további képzési lehetőséget kínál az AO. A nyár végén a Magyar Traumatológus Társaság 50 éves fennállását ünnepli. Az eseményt az MTT ünnepi trauma kongresszussal, valamint ehhez kapcsolódó AO mesterkurzussal kívánja emlékeztetessé tenni. A színes szakmai anyag mellett, az oktatói gárda is kivételes lesz ezen a rendezvényen.

Az AO Bázis kurzusához kívánok minden résztvevőnek hasznos és kellemes időtöltést, Szegeden!
Bővebb információ a rendezvényekről és a tagságról a <https://www.aofoundation.org> honlapon érhető el.

Prof. Dr. Varga Endre

AO Trustee

Tanszékvezető egyetemi tanár

Szegedi Tudományegyetem

Szent-Györgyi Albert Klinikai Központ

Traumatológiai Klinika

Welcome words

Dear Colleagues,

It is an honor for me to welcome you as the president of the AOTrauma Basic Principles of Fracture Management course in Szeged. The AO (Arbeitsgemeinschaft für Osteosynthesefragen) was founded about 60 years ago in Switzerland with the dedication which stayed throughout the years to improve the quality of the patients care in trauma and orthopedic surgery. Because of it's success the AO spread around the world. Even in Hungary AO Trauma has more than fifty members. The representatives of the Hungarian AO are holding postgraduate courses, seminars, trainings for trauma,- orthopedic, -spine,- maxillofacial surgeons and for ORP's not just in Hungary but in neighboring countries, too. The leadership of the Hungarian AO regularly delegates talented members to the „Faculty trainings“ and to the „Chairman Education Programs“, which is organized by the AO Foundation.

I am delighted that this year the AOTrauma Basic Principles of Fracture Management course takes place in my hometown, Szeged. The Basic course together with the ATLS has been mandatory for the newly entered trauma-orthopedic residents since 2013. Attending the basic course may be the first step for everyone to improve their theoretical and practical ability on the road which leads to the way to be an active member of the renewed AOTrauma team in Hungary.

In the year 2016, AO will also offer courses. At the end of the summer, the Hungarian Society for Traumatology will be celebrating it's 50 years of existence with a Congress and in connection with that congress there will also be an AO Master course. Beside the experienced faculties from Hungary, international well-known colleagues will also participate there.

I hope this course both professionally and in terms of recreation will be memorable for all of us.

I wish you much success and useful freetime in my hometown.

For more information about the AO FOUNDATION please check :www.aofoundation.org

Prof. Endre Varga, MD.

Head of Trauma Department
Head of Central Operation Rooms and Sterilization Unit
Professor of Trauma Surgery
general-, trauma- hand- & orthopedic-surgeon
Past President of Hungarian Trauma Society
AO Trustee
Chair of ATLS Hungary
National Delegate for ESTES

Chairperson



Prof. Endre Varga, MD.

Szeged, Hungary
 endrevargamd@yahoo.com

Head of Trauma Department
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 Past President of Hungarian Trauma Society
 AO Trustee
 Chair of ATLS Hungary
 National Delegate for ESTES

Regional Faculty

Baumgaertel	Friedrich	Germany
Novakovic	Vladan	Serbia

Local Faculty

Csonka	Endre	Hungary
Gunther	Tibor	Hungary
Nacsai	István	Hungary
Simonka	János Aurél	Hungary
Szabó	Zsolt	Hungary
Tóth	Ferenc	Hungary
Turchányi	Béla	Hungary
Urbán	Ferenc	Hungary
Varga	Endre	Hungary
Wiegand	Norbert	Hungary

Table Instructors

Csonka	Ákos	Hungary
Csonka	Endre	Hungary
Csete	Károly	Hungary
Kószó	Balázs	Hungary
Ungvári	Gábor	Hungary

Guest Faculty Anesthesiology

Molnár	Zsolt	Hungary
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Tuesday, 9 February, 2016

TIME	AGENDA ITEM	WHO
	LOCATION: Szent-Györgyi Albert Agóra	
17:00–20:00	Faculty meeting	Faculty members
20:00–	Faculty dinner	Faculty members

Wednesday, 10 February, 2016

TIME	AGENDA ITEM	WHO
	LOCATION: Díszterem	
08:00–08:10	Welcome and introduction	E Varga
08:10–08:25	The AO world – From history to lifelong learning	E Varga
08:25–08:40	Influence of the patient factors and the mechanism of injury on fracture management	T Gunther
08:40–08:55	The (soft-tissue) injury – a high priority consideration	Zs Szabó
08:55–09:15	Absolute stability: biomechanics, techniques, and fracture healing	V Novakovic
09:15–09:35	Relative stability: biomechanics, techniques, and fracture healing	I Nacsai
09:35–09:40	LOCATION CHANGE TO PRACTICAL EXERCISE: Informatórium	
09:40–10:45	Practical exercise 1 Internal fixation with screws and plates – absolute stability - Video 00110 - Bone model: 0066 - Power tool (video only)	T Gunther Table instructors: 1. Á Csonka 2. E Csonka 3. K Csete 4. B Kószó 5. G Ungvári
10:45–11:00	COFFEE BREAK	

LOCATION: Díszterem

11:00–11:10	Bone healing: review of learning outcomes of eLearning module	F Tóth
11:10–11:20	Fracture classification: review of learning outcomes of eLearning module	V Novakovic

LOCATION CHANGE TO SMALL GROUP DISCUSSIONS: 1. Room I., 2. Room II., 3. Room III., 4. Room IV., 5. Díszterem

11:20–12:10	Small group discussion 1 Discussion on general principles, classification, concepts of stability, their influence on bone healing, and how to apply implants to achieve appropriate stability	
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Group A: E Csonka – Zs Szabó
 Group B: J A Simonka – T Gunther
 Group C: I Nacsai – F Urbán
 Group D: F Baumgaertel – N Wiegand
 Group E: B Kószó – G Ungvári

12:10–13:05 LUNCH BREAK

LOCATION: Dízsterem

13:05–13:20 Fracture fixation using locking plates – when, why, and how F Baumgaertel

13:20–13:40 Principles of diaphyseal fracture management – what is important in treating these fractures? J A Simonka

13:40–13:55 Reduction techniques of diaphyseal fractures – principles and methods I Nacsai

13:55–14:00 **LOCATION CHANGE TO SMALL GROUP DISCUSSIONS:
1. Room I., 2. Room II., 3. Room III., 4. Room IV.,
5. Dízsterem**

14:00–15:10 **Small group discussion 2
Management principles for the treatment of diaphyseal fractures**

Group A: F Baumgaertel –N Wiegand
Group B: E Csonka – Zs Szabó
Group C: J A Simonka – T Gunther
Group D: I Nacsai – F Urbán
Group E: B Kószó –G Ungvári

15:10–15:30 COFFEE BREAK

LOCATION: Informatórium

15:30–16:40 **Practical exercise 2
Principle of the internal fixator using the locking compression plate (LCP)** G Ungvári
Table instructors:
1. Á Csonka
2. E Csonka
3. K Csete
4. B Kószó
5. I Nacsai

- Video: 00112
- Bone model: 1142
- Bone model 0068

LOCATION CHANGE TO LECTURE HALL: Dízsterem

16:45–17:00 Principles of articular fractures management – how do they differ from diaphyseal fractures? F Urbán

17:00–17:15 Reduction techniques for articular fractures – principles and methods F Baumgaertel

LOCATION: Kamaraterem

17:25–19:25 **AO Skills Lab** Skill Lab Director:
F Baumgaertel
Á Csonka
E Csonka
Zs Szabó
B Kószó
G Ungvári
J A Simonka
K Csete
F Urbán
I Nacsai
F Tóth

- Torque measurement of bone screws
- Soft-tissue penetration during drilling
- Heat generation during drilling
- Mechanics of bone fractures
- Fracture healing
- Techniques of reduction
- Mechanics of intramedullary fixation
- Mechanics of plate fixation part 1
- Mechanics of plate fixation part 2
- Damaged implant removal

19:25–19:45 Discussion of faculty Faculty members

Thursday, 11 February, 2016

TIME	AGENDA ITEM	WHO
	LOCATION: Informatórium	
08:00–09:00	<p>Practical exercise 3 Intradmedullary nailing</p> <p>This nailing exercise can be done for a tibial shaft fracture or a femoral shaft fracture. Tibial shaft fractures — reamed IM nailing with the expert tibia nail (ETN)</p> <p>- Video: 00130 - Bone model: 1149-01, (and ASLS perspex model)</p>	<p>I Nacsai Table instructors: 1. Á Csonka 2. E Csonka 3. K Csete 4. B Kószó 5. G Ungvári</p>
09:00–09:20	COFFEE BREAK	
	LOCATION: Díszterem	
09:20–09:35	Distal radial fractures—which to fix? How to fix?	F Tóth
09:35–09:50	Fractures of the olecranon and patella (Tension Band stabilization)	B Turchányi
09:50–10:05	Forearm fractures need understanding of principles for diaphyseal and articular fractures	T Gunther
10:05–10:20	Preoperative planning — rationale and how to do it	F Baumgaertel
10:20–11:30	Preoperative planning — “plan your forearm operation” (Templating exercise)	F Urbán
11:30–12:30	LUNCH BREAK	
	LOCATION: Informatórium	
12:30–13:40	<p>Practical exercise 4 Operate your plan — fixation of a 22-C1 forearm fracture using the LCP 3.5 (8 and 11 holes)</p> <p>- No video - Bone model: 6501 - 6 bone spreader 399.100</p>	<p>J A Simonka Table instructors: 1. Á Csonka 2. E Csonka 3. K Csete 4. B Kószó 5. G Ungvári</p>
13:40–13:55	Ankle fractures — a logical approach for their fixation	N Wiegand
13:55–14:10	Femoral neck fractures	E Csonka
14:10–14:25	Trochanteric fractures	F Baumgaertel
14:25–14:40	Distal femoral fractures — management principles	B Turchányi
14:40–14:55	Tibial plateau fractures	N Wiegand
14:55–15:15	COFFEE BREAK	

LOCATION: 1. Room I., 2. Room II., 3. Room III., 4. Room IV., 5. Díszterem

15:15–16:25	Small group discussion 3 Management principles for the treatment of articular fractures	
	Group A: I Nacsai – F Urbán Group B: F Baumgaertel -N Wiegand Group C: E Csonka– Zs Szabó Group D: J A Simonka – T Gunther Group E: B Kószó –G Ungvári	
16:25–16:30	LOCATION CHANGE TO LECTURE HALL: Díszterem	
16:30–16:40	Minimally invasive osteosynthesis (MIO) – when to use it?	V Novakovic
16:40–16:50	Radiation hazards	Zs Szabó
16:50–16:55	LOCATION CHANGE TO PRACTICALS: Informatórium	
16:55–18:05	Practical exercise 5 Fixation of a trochanteric fracture	E Csonka Table instructors: 1. Á Csonka 2. B Turchányi 3. K Csete 4. B Kószó 5. G Ungvári
	IM nailing of a proximal femur using a proximal femoral nail anti-rotation (PFNA) - Video: 00125 - Bone model: 2220	
18:05–18:10	LOCATION CHANGE TO LECTURE HALL: Díszterem	
18:10–18:25	Anesthesiological aspects of trauma care	Zs Molnár
18:25–18:40	Fixation principles in osteoporotic bone – the geriatric patient	E Csonka
18:40–19:15	Discussion of faculty	Faculty members
20:00–	Course dinner	All

Friday, 12 February, 2016

TIME	AGENDA ITEM	WHO
	LOCATION: Informatórium	
08:00–08:30	Practical exercise 6 Tension band wiring of the olecranon	F Urbán Table instructors: 1. Á Csonka 2. E Csonka 3. K Csete 4. B Kószó 5. G Ungvári
	- Video: 00132 - Bone model: 6011	
08:30–09:30	Practical exercise 7 Management of a malleolar fracture	B Turchányi Table instructors: 1. Á Csonka 2. E Csonka 3. K Csete 4. B Kószó 5. G Ungvári
	Management of a malleolar fracture type 44–B - Video: 00114 - Bone model: 3118	

09:30–09:50 COFFEE BREAK

LOCATION: Dízsterem

09:50–10:05	Treatment algorithms for the polytrauma patient	E Varga
10:05–10:20	Emergency management of pelvic fractures – a critical skill can save lives	E Varga
10:20–10:35	Management of open fractures	J A Simonka
10:35–10:50	Infection after osteosynthesis – how to diagnose and manage	T Gunther
10:50–11:05	Delayed healing – causes and treatment principles	V Novakovic

11:05–11:10 **LOCATION: 1. Room I., 2. Room II., 3. Room III., 4. Room IV., 5. Dízsterem**

12:30–13:40 **Small group discussion 4
Final case discussion (eg, polytrauma, complications, special fractures...)**

Group A: E Csonka – T Gunther
Group B: I Nacsai – F Urbán
Group C: G Ungvári- N Wiegand
Group D: A J Simonka – Zs Szabó
Group E: B Kószó – G Ungvári

12:10–13:10 LUNCH BREAK

LOCATION: Informatórium

13:10–14:20	Practical exercise 8 Stabilization of the pelvic ring using a large external fixator - Video: 00122 - Bone model: 4083	E Varga Table instructors: 1. Á Csonka 2. E Csonka 3. K Csete 4. B Kószó 5. G Ungvári
14:20–15:20	Practical exercise 9 Tibial fractures treated with different external fixator frame constructs – assessment of stability - Video: 00135 - Bone model: 1118	V Novakovic Table instructors: 1. Á Csonka 2. E Csonka 3. K Csete 4. B Kószó 5. G Ungvári

15:20–15:25 **LOCATION CHANGE TO LECTURE HALL: Dízsterem**

15:25–15:35	Implant removal – Why, when, and how?	F Tóth
15:35–15:50	The future of fracture treatment	E Varga
15:50–16:00	Closing	E Varga
16:00–16:30	Discussion of faculty	Faculty members

Course organization

AOTrauma Europe

Calandelerstrasse 8
7270 Davos, Switzerland
Phone +41 81 414 27 20
Fax +41 81 414 22 84
Email courses@aotrauma.org

Course logistics

Industrial Partner

Edina Buzas
Nagyenyed utca 8-14.
1123 Budapest, Hungary
Phone +36 1 884 28 48
Fax +36 1 884 27 58
Email ebuzas@its.jnj.com

Course venue

Szent-Györgyi Albert Agóra

Kálvária sugárút 23.
6722 Szeged, Hungary
Web <http://www.agoraszeged.hu/intezmenyek/szent-gyorgyi-albert-agora>
Phone +36 62 563 480
Email kapcsolat@agoraszeged.hu



Course information

Course fee

AOTrauma Course—Basic Principles of Fracture Management:

Local attendees: 80.000 HUF

International attendees: 400 EUR

Included in the course fee are conference bag with documentation, coffee breaks, lunches and course certificate.

Accreditation

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

Evaluation guidelines

All AOTrauma courses apply the same evaluation process, either audience response system (ARS) or paper and pencil questionnaires. This will help AOTrauma to ensure that we continue to meet your training needs. In some regions, CME accreditation is dependent on the participant's evaluation results

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 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 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, theft, or other risks.

Mobile phone use

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.

Transportation

Transport should be arranged individually.

Dress code

Casual

Driving excellence and empowering the next generation

AOTrauma membership

Discover the advantages of joining the leading global trauma and orthopedic community, providing its members with education, research and networking opportunities worldwide.

Apply for membership at www.aotrauma.org



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