



## Osteosynthese International 2017

osteosynthese2017.de



13-15 SEPTEMBER 2017

# **MUNICH**

**PROGRAMME** 

## Programme overview

Wednesday, 13 September	Thursday, 14	September	Friday, 15	September
Main lecture hall	Main lecture hall	Room D 1.02	Main lecture hall	NARVISLab
	08:30-09:30	08:30-11:30	08:30-09:40	
	Session IV	SawBoneLab	Session X	
	Foot and ankle	Circular frame hexapod	Tibia	
		and radiation-free		
	p. 10	interlocking of nails	p. 16	
	P. 11		ρ. το	
	10:00–11:10		10:00–11:10	ı
	Session V		Session XI	
from 11:00	Analysis and planning		Wrist and elbow	
Registration, Poster	, ,			
nounting		00		
<b>-</b>	p. 10	p. 20	p. 16	
	11,20, 12,20	ı	11:20 12:20	
	11:30–12:30 Session VI		11:30–12:30 Session XII	
	Intramedullary nailing 1		Femur	
	mariodalidiy naling i		Tomai	
	p. 11		p. 17	
	12:30–13:30			
	Poster session p. 12			
13:30–14:30	13:30–14:40		13:30–14:40	
Session I Proximal femur	Session VII Defect and pseudarthrosis		Session XIII Knee	
TOAIIIIai Ieiiiui	Delect and pseudantinosis		Milec	
p. 8	p. 13		p. 17	l
15:00–16:00	15:00–16:10	15:00–18:00	15:00–16:05	15:00–16:00
Session II	Session VIII	DrawingLab	Session XIV	NARVISLab
Humerus	Osteoporosis and trauma in		Free topics	Augmented reality tour
	the elderly			
p. 8	p. 14		p. 18	p. 2
ρ. ο	γ. ιτ		16:05–16:35	, p. 2
16:30–17:00	16:30–18:00		Closing ceremony	
Opening ceremony	Session IX		,,	
17:00–18:00	Intermedullary nailing 2			
Session III	(innovations)			
Pediatric	n 15	p. 21		
	p. 15	p. 21		
- 0	18:00–19:30			
p. 9				
p. 9	General assembly			
p. 9	General assembly 20:00			
р. 9	General assembly	n 24		
p. 9	General assembly 20:00	p. 24		
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### Organisation and imprint

### Venue

Ludwig-Maximilians University Munich Pettenkoferstraße 14 | 80336 Munich/DE

### Date

13-15 September 2017

### Congress website

www.osteosynthese2017.de

### Hosting society

Gerhard Küntscher Society

### Congress president

Peter H. Thaller, MD
Leading Consultant – 3D-Surgery
Department General, Trauma and Emergency Surgery
University Hospital LMU Munich
Nußbaumstraße 20 | 80336 Munich/DE

### Academic organising committee Munich

Dr. med. Nikolaus Degen Dr. med. Julian Fürmetz Dr. med. Florian Wolf Priv. Doz. Dr. med. Christian Zeckey, MHBA

### Professional congress organiser

Conventus Congressmanagement & Marketing GmbH Maria Pechtl Carl-Pulfrich-Straße 1 | 07745 Jena/DE Phone +49~3641~31~16-354 | Fax +49~3641~31~16-243 osteosynthese2017@conventus.de | www.conventus.de

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Gerald Wozasek (Vienna/AT)
Christian Zeckey (Munich/DE)
Robert D. Zura (New Orleans, LA/US)





Dear colleagues, Dear members of the Gerhard Küntscher Society.

We are honoured to welcome you to Osteosynthese International 2017,

Annual Meeting of the Gerhard Küntscher Society, which will be held in Munich, Germany from 13-15 September 2017, Gerhard Küntscher's interest in and his first publication on "The Distribution of Forces in the Bone" in 1935 resulted in a patent by his congenial friend and technician Ernst Pohl for an "Internal Splint for Long Bones" in 1939. The reactions on the presentation of Küntscher's first 39 cases on the 68th meeting of the German Society of Surgery 1940 were more than controversial. Despite this, the intramedullary rod became an inevitable tool in orthopaedic trauma surgery.

But nailing of long bones is just one of several solutions to fix bone. "Osteosynthese International" is open for all other kinds of implants, treatments and other musculoskeletal knowledge. The topics for Osteosynthese International 2017 will be pseudarthrosis and bone defects, pre-operative decision-making, standards and perspectives in intramedullary nailing and free topics. Especially in clinical decision-making, we hope to promote interesting discussions on competing implants and planning of interventions.

Several hands-on workshops will be organised. Among these, the 3D-Surgery group will offer workshops on analysis and planning of deformity corrections and hands-on labs for nailing and applications of hexapod external fixation. An "Augmented Reality Tour" offers a brief insight into future aspects of surgery.

The meeting will be held in the centre of Munich on the ancient campus of the University of Munich, which dates back more than 200 years. Besides the various brilliant attractions of Munich, you will have the chance to join the biggest festival of the world – the Octoberfest. The campus is in short walking distance from the Octoberfest, which will start the morning after the congress with the impressive "Parade of Tent Patrons" through the streets of Munich.

We want to challenge our colleagues from all over the world, young and old, to join the meeting and present their research. Discuss with and learn from each other and last but not least enjoy the typical heart-warming Bavarian hospitality.

Welcome to Munich!

Peter H. Thaller

Congress president

Jan Verbruggen

President Gerhard Küntscher Society



Dear colleagues,

I am honored to welcome you to the Osteosynthese International 2017, Annual Meeting of the Gerhard Küntscher Society, in Munich. In the tradition of the internationally active Küntscher Society, this meeting is focusing on intramedullary nailing. But the meeting is also open to innovative new treatment options. The meeting offers again a very interesting mix of talks, presentations and workshops.

This years topics are pseudarthrosis and bone defects, pre-operative decision-making, standards and perspectives of intramedullary nailing.

The meeting will be held in the historic University Hospital of the Ludwig Maximilian University (LMU) in the heart Munich.

This year Annual Meeting of the Küntscher Society will also be held parallel to the 25th Annual Meeting of the European Orthopaedic Research Society, which is located right next door. Both meetings have different focus, but can widen the spectrum for all participants and will give special offers to each other.

Munich is well known for the world largest folk festival: the Oktoberfest. Therefore, participants have the opportunity to visits the Oktoberfest only in a few minutes walk from the congress center.

The organizing committee has created a very excellent program, which gives the right setting for an exciting scientific meeting with stimulating discussions. I hope, that the additional extraordinary social program combined with the unique attractions of Munich will help you to fully enjoy the Annual Meeting of the Gerhard Küntscher Society.

Welcome to Munich!

Prof. Dr. Wolfgang Böcker

Head Dept. of Trauma Surgery, LMU Munich

## Scientific programme | Wednesday, 13 September

From 11:00 Foyer	Registration and poster mounting
11:00–12:30 D 1.02	Board meeting Gerhard Küntscher Society
13:30–14:30	Session I – Proximal femur
Main lecture hall Chairs	Roland Biber (Nuremberg/DE), Kemal Durak (Bursa/TR)
13:30 OP 01	How to prevent cut-out and cut-through in biaxial proximal femoral nails: Is there anything beyond lag screw positioning and tip-apex-distance? Roland Biber (Nuremberg/DE)
13:50 OP 02	Importance and technique of preserving femoral neck length in unstable extra-capsular Intertrochanteric and Sub-trochanteric fractures neck femur Rajat Varma (London/GB)
14:00 OP 03	Does the same Cannulated screw position can be used for all femoral neck fracture treatment — an optimized finite element analysis Mehmet Nuri Konya (Afyon/TR)
14:10 OP 04	Arthroplasty or internal fixation for displaced femoral neck fractures in risk patients? Osteosynthesis by the method of BDSF in a 78 y.o. male with untreated diabetic foot and in a 102 y.o. male Orlin Filipov (Sofia/BG)
14:20 OP 05	Comparison of hemiarthroplasty and total hip arthroplasty in elderly patients with displaced femoral neck fractures Fatih Cansah Barishan (Bursa/TR)
14:30–15:00	Coffee break
15:00–16:00 Main lecture hall	Session II – Humerus
Chairs	Georg Gradl (Munich/DE), Alvaro Callizo (Asunción/PR)
15:00 IL 01	Intramedullary nailing of the complex proximal humerus fracture! Or is plating less demanding? Georg Gradl (Munich/DE)
15:20 OP 06	Neglected unreduced posterior shoulder dislocation — results of operative treatment Alvaro Callizo (Asunción/PR)

## Scientific programme | Wednesday, 13 September

15:30 OP 07	Virtual morphological analysis of different intramedullary proximal humerus nails in the population of the People's Republic of China Tobias Harnoss (Kempten/DE)
15:40 OP 08	Humeral head necrosis after proximal humeral nailing — What are the reasons for bad outcome? Roland Biber (Nuremberg/DE)
15:50 OP 09	Management of gunshot wounds and ballistic fractures of the upper extremity: our experience at an urban trauma center and review of literature Thomas P. Royals (New Orleans, LA/US)
16:00–16:30	Coffee break
16:30–17:00 Main lecture hall	Opening ceremony
17:00–18:00	Session III – Pediatric
Main lecture hall Chairs	Robert D. Zura (New Orleans, LA/US), Metin Kucukkaya (Istanbul/TR)
17:00 OP 10	Risk factors for nonunion of bone fracture in pediatric patients Robert D. Zura (New Orleans, LA/US)
17:10 OP 11	Surgical treatment of displaced radial neck fractures in children with Metaizeau technique Guvenir Okcu (Izmir/TR)
17:20 OP 12	Youngest bilateral femoral lengthening case with the PRECICE lengthening nail Metin Kucukkaya (Istanbul/TR)
17:30 OP 13	Clinical outcomes and complications in titanium elastic nailing osteosynthesis of pediatric femur fractures report of 47 cases between 1995–2017 Kemal Kayaokay (Sanlıurfa/TR)
17:40 OP 14	Forearm compartment pressures in children with supracondylar fractures of the humerus Togac Sarisozen (Bursa/TR)
17:50 OP 15	Peri-Implant fracture following arthrodesis of the hip in childhood Alexander Keppler (Munich/DE)

	08:30-11:30 Room D 1.02 Chair	SawBoneLab — Circular frame hexapod and radiation-free interlocking of nails (see p. 20 for details) Christian Zeckey (Munich/DE)
	08:30–09:30 Main lecture hall Chairs	Session IV – Foot and ankle
		Matthaios Savvidis (Thessaloniki/GR), Thomas Mittlmeier (Rostock/DE)
	08:30 OP 16	Peritalar dislocations — mid-term clinical, radiological and pedographic results Matthaios Savvidis (Thessaloniki/GR)
	08:40 IL 02	The retrograde circular arc interlocking nail for tibio-talo-calcaneal correction arthrodesis Thomas Mittlmeier (Rostock/DE)
	08:50 OP 17	Arthroscopy assisted fixation of depression type intraarticular fractures of the distal tibial plafond Oğuz Poyanlı (Istanbul/TR)
	09:00 OP 18	Posterior mini open approach of talar fractures Gürdal Nusran (Canakkale/TR)
	09:10 OP 19	A new interlocking nail vs. standard locking plate for calcaneal fracture fixation: a prospective matched-pairs study Anica Herlyn (Rostock/DE)
	09:20 OP 20	Cost savings using ITS small fragment plating in lateral malleolus ankle fractures: our experience at an Urban Trauma Center Thomas P. Royals (New Orleans, LA/US)
	09:30-10:00	Coffee break
	10:00–11:10 Main lecture hall Chairs	Session V – Analysis and planning
		Donghoon Lee (Seoul/KR), Florian Wolf (Munich/DE)
	10:00 IL 03	Analysis and Planning of Deformity Corrections Florian Wolf (Munich/DE)
	10:15 IL 04	Indications for Osteotomies Donghoon Lee (Seoul/KR)
	10:30 OP 21	The effect of different preoperative planning methods on the proximal femoral angles in correction of the deformities of femur Mehmet Fatih Erol (Tekirdag/TR)

10:40 OP 22	Does the position of the patella change during the distraction osteogenesis of the femur?  Donghoon Lee (Seoul/KR)
10:50 OP 23	Is there an increase in valgus deviation in tibial distraction using the intramedullary lengthening nail technique?  Donghoon Lee (Seoul/KR)
11:00 OP 24	Rotational influence in measuring femoral neck inclination — neck shaft angle vs. medial proximal femoral angle Nikolaus Degen (Munich/DE)
11:10–11:30	Coffee break
11:30–12:30	Session VI – Intramedullary nailing 1
Main lecture hall Chairs	Peter Giannoudis (Leeds/GB), Kemal Aktuglu (Istanbul/TR)
11:30 OP 25	Intramedullary nailing using poller (blocking) screws in distal femurs with poor bone quality Brandi Hartley (Louisville, KY/US)
11:40 OP 26	Indications for suprapatellar nailing Florian Wolf (Munich/DE)
11:50 OP 27	Is there time difference between unions in the femurs of bilateral femoral nailing procedure applied at the same session?  Enes Öçalan (Izmir/TR)
12:00 OP 28	Reduction in intramedullary nailing – rotational control Christian Zeckey (Munich/DE)
12:10 OP 29	Can treating "femur fractures caused by gunshot injury (GSI)" with intramedullary nailing at the first session be a reliable procedure? Enes Öçalan (Manisa/TR)
12:20 OP 30	Distal locking of IM nail in trochanteric femur fractures treatment — How many screws should be used? Andriy Kalashnikov (Kyiv/UR)
12:30–13:30	Lunch break

12:30–13:30	Poster session
Foyer Chairs	Christian Zeckey (Munich/DE), Gerald Wozasek (Vienna/AT)
P 01	Infrapectineal plating in acetabular fracture Sangeun Park (Seoul/KR)
P 02	A case of infected pseudoarthrosis of the femur after open subtrochanteric fracture Viktor Spassoff (Sofia/BG)
P 03	LCP fixation and intramedullary augmentation with frozen fibular graft for femoral pseudarthrosis Dian Enchev (Sofia/BG)
P 04	Olecranon fractures — Are locking plates better? Andrew Garber (Louisville, KY/US)
P 05	My big broken implant Andrew Garber (Louisville, KY/US)
P 06	Injuries associated with clavicle fractures Ozhan Pazarci (Sivas/TR)
P 07	Hip arthroplasty after femoral head gunshot injury Ozhan Pazarci (Sivas/TR)
P 08	Diagnosis and management of nonunited conservatively treated lateral malleolar fractures Khaled El-Adwar (Alexandria/EG)
P 09	Endoprosthesis of temporomandibular joint with individual height-adjustable titanium head prostheses in children and adolescents in clinical practice Irina Belova (Moscow/RU)
P 10	Nanotechnological coatings of metal endoprostheses and fixation structures in osteosynthesis – Russian experience of their application (2) Irina Belova (Moscow/RU)
P 11	Pelvic support osteotomy; salvage procedure in chronically dislocated hips: technical note for the on-lay bone positioning of a lengthening nail and review of the literature  Peter Reynders (Brussels/BE)

P 12	Nanotechnological coatings of metal endoprostheses and fixation structures in osteosynthesis – the Russian experience of their preparation (1) Irina Belova (Moscow/RU)
P 13	Assessing the potential of neurological remission at admission after TSCI: the elastic net regression approach Raban Heller (Heidelberg/DE)
P 14	Intramedullary osteosynthesis of hip fractures in elderly – our experience Igor Kaftandziev (Skopje/MK)
P 15	New methods of osteosynthesis in periprotective fractures using classical materials of osteosynthesis  Danut Nicolae Tarnita (Craiova/RO)
P 16	Functional outcomes and economic costs of intra-articular distal radius fractures: a comparative study of open reduction internal fixation (ORIF) with volar locking plates versus closed reduction external fixation(CREF) with pinning management Young-Woo Chung (Gwangju/KR)
P 17	Comparison of intramedullary nailing with K-wire versus fixation with plate in metacarpal mid-shaft fracture Young-Woo Chung (Gwangju/KR)
P 18	Biomechanical comparison of the primary stability of two intramedullary ankle arthrodesis nails Vincent Karas (Munich/DE)
P 19	Lateral malleol epiphyseal fracture by posterior inferior tibiofibular and inferior transverse ligament avulsion — a rare case report Hakan Ozbay (Istanbul/TR)
13:30–14:40 Main lecture hall	Session VII – Defect and pseudarthrosis
Chairs	Julian Fürmetz, Christian Zeckey (Munich/DE)
13:30 IL 05	Reconstruction of defects by bonetransport Julian Fürmetz (Munich/DE)
13:45 IL 06	Reconstruction of defects by Masquelet-technique Christian Zeckey (Munich/DE)
14:00 OP 31	Nonunion and unplanned reoperation rates in adult distal and diaphyseal femoral fractures – a systematic review and meta-analysis Robert D. Zura (New Orleans, LA/US)

14:10 OP 32	Revision of atrophic femur shaft non-unions-reamed intramedullary nailing versus additional application of bone morphogenetic protein (BMP) and spongiosa Lena Hellinger (Murnau/DE)
14:20 OP 33	Low-grade-infection in the pathogenesis of primarily aseptically classified nonunion of the lower extremity Simon Hackl (Murnau/DE)
14:30 OP 34	Management of impending and pathologic fracture in the femur Rodolfo A. Zamora (Louisville, KY/US)
14:40–15:00	Coffee Break
15:00–18:00	DrawingLab – Analysis and planning (see p. 21 for details)
Room D 1.02 Chair	Nikolaus Degen (Munich/DE)
15:00–16:10	Session VIII – Osteoporosis and trauma in the elderly
Main lecture hall Chairs	Christian Kammerlander (Munich/DE), Thomas Klestil (Vienna/AT)
15:00 IL 07	Cemented PFN-A Christian Kammerlander (Munich/DE)
15:15 IL 08	Periprosthetic fractures Thomas Klestil (Vienna/AT)
15:30 OP 35	One-step approach for the augmentation of osteoporotic fratures using adipose derived progenitor cells – from mice to men Franziska Saxer (Basel/CH)
15:40 OP 36	Fragility fractures of the ankle in the elderly — open reduction and internalfixation versus tibio-talo-calcaneal nailing — short-term results of a prospective randomized-controlled study Matthaios Savvidis (Thessaloniki/GR)
15:50 OP 37	Atypical femur fractures under long-term intravenous bisphosphonate therapy Deborah Schray (Munich/DE)
16:00 OP 38	Orthogeriatric patients with proximal femoral fractures benefit from inpatient rehabilitation Daniel Pfeufer (Munich/DE)
16:10–16:30	Coffee break

16:30–18:00 Main lecture hall	Session IX – Intermedullary nailing 2 (innovations)
Chairs	Kang-II Kim (Seoul/KR), Peter H. Thaller (Munich/DE)
16:30 IL 09	Corrective proximal tibial osteotomy using an intramedullary tibial nail for genu varum in young adults Kang-II Kim (Seoul/KR)
16:45 IL 10	Overview on lengthening nails Peter H. Thaller (Munich/DE)
17:00 OP 39	The importance of posterior femoral cortex reaming during insertion of the lengthening nails Metin Kucukkaya (Istanbul/TR)
17:10 OP 40	Simultaneous lengthening and deformity correction by magnetically driven lengthening nails Florian Wolf (Munich/DE)
17:20 OP 41	Management of tibia fractures using Expert Tibia Nail (ETN) — suprapatellar vs. infrapatellar approach Riyadh Aldeeri (Heidelberg/DE)
17:30 OP 42	Arthrofibrosis after intramedullary nailing or plating of the distal femur Lonnie Douglas (Louisville, KY/US)
17:40 OP 43	The innovative limited-flexible BoneHelix® — a totally new principle for longbone fracture stabilization tops the stiff intramedullary nail Rainer Labitzke (Schwerte/DE)
17:50 OP 44	Evaluation of an intracorporeally ultrasonic welded PEEK IM nail system Justin Beyers (Effingham, IL/US)
18:00–19:30 Main lecture hall	General assembly
from 20:00	Conference dinner (see p. 24 for details)

08:30-09:40	Session X – Tibia
Main lecture hall Chairs	Oğuz Poyanlı (Istanbul/TR), Miroslaw Falis (Poznan/PL)
08:30 IL 11	The Kuntscher legacy in South America Alvaro Callizo (Asunción/PR)
08:45 IL 12	Intramedullary nails — extending indications, extending areas Miroslaw Falis (Poznan/PL)
09:00 OP 45	What are the results of minimally invasive plate osteosynthesis for femoral and tibial comminuted fracture? Erfan Sheikhbahaei (Isfahan/IR)
09:10 OP 46	A prospective randomized study on operative treatment for simple distal tibial fractures – minimally invasive plate osteosynthesis versus minimal open reduction and internal fixation Ki Chul Park (Guri/KR)
09:20 0P 47	Comparison of intramedullary nailing versus plate fixation in distal tibia shaft fractures Aslihan Durak (Bursa/TR)
09:30 OP 48	An arthroscopy assisted reduction and fixation technique of complex postero-lateral tibial plateau fractures Oğuz Poyanlı (Istanbul/TR)
09:40-10:00	Coffee break
10:00–11:10 Main lecture hall	Session XI – Wrist and elbow
Chairs	Wilhelm Friedl (Aschaffenburg/DE), Jan Verbruggen (Maastricht/NL)
10:00 IL 13	New multidirectional angular stable plate fixation in transcondylar humerus fractures (trochlius plate) Wilhelm Friedl (Aschaffenburg/DE)
10:20 OP 49	Collapse patterns of 23- $\rm C_2$ , $\rm C_3$ fractures fixed with volar locked plates — Can the intermediate column collapse independently? Mihail Rashkov (Sofia/BG)
10:30 OP 50	Results of surgical treatment of frykman type 7-8 fractures in wrist Murat Demiroglu (Istanbul/TR)
10:40 OP 51	Plate removal following distal radius fracture surgery is related to Soong grading Caroline Selles (Amsterdam/NL)

10:50 OP 52	Is nailing a safe procedure in forearm fractures regarding radioulnar synostosis? Esat Uygur (Istanbul/TR)
11:00 IL 14	Humeral lengthening – case report Bruce Foster (Adelaide/AU)
11:10–11:30	Coffee break
11:30–12:30	Session XII – Femur
Main lecture hall Chairs	David Seligson (Louisville, KY/US), Guvenir Okcu (Izmir/TR)
11:30 OP 53	Erich Lexer – surgeon and scoundrel David Seligson (Louisville, KY/US)
11:50 OP 54	Antegrade nailing versus locked plating for extra-articular distal femoral fractures Enes Öçalan (Manisa/TR)
12:00 OP 55	Are there biomechanical benefits in augmentation of LISS plating compared to conventional LISS plating? Dimitar Todorov (Sofia/BG)
12:10 OP 56	Clinical outcomes of arthroscopy-assisted retrograde femoral nailing of distal femoral fractures — How much minimal invasive can it be?  Oğuz Poyanlı (Istanbul/TR)
12:20 OP 57	Study of the gap size, fixaion system and nail material in the stability of anrograde reamed intramedullary nail in femoral transverse fractures Sergio Gabarre (Zaragoza/ES)
12:30–13:30	Coffee break
13:30–14:40	Session XIII – Knee
Main lecture hall Chairs	Simon Weidert, Julian Fürmetz (Munich/DE)
13:30 IL 15	Reconstruction after knee injuries Gerald E. Wozasek (Vienna/AT)
13:45 IL 16	Deformity correction around the knee — supracondylar and high tibial Julian Fürmetz (Munich/DE)
14:00 OP 58	Role and technical tips in management of comminuted fractures of distal femur with intra-articular extension into the knee joint Rajat Varma (London/GB)

14:15 OP 59	Modification of modified judet quadricepsplasty Mustafa G. Bilgili (Istanbul/TR)
14:25 IL 17	Augmented reality in trauma and orthopedic surgery Simon Weidert (Munich/DE)
14:40–15:00	Coffee break
15:00–16:00 NARVISLab Chair	NARVISLab – Augmented reality tour (see p. 22 for details)
	Simon Weidert (Munich/DE)
15:00–16:05 Main lecture hall Chairs	Session XIV – Free topics
	Peter Reynders (Brussels/BE), Gerald E. Wozasek (Vienna/AT)
15:00 IL 18	Fractures around the pelvis, pelvic rim and acetabulum in the elderly Peter Reynders (Brussels/BE)
15:15 OP 60	Usage of the blocking nail as a new approach to treat patients with pubic fractures. a case series on patients with anterior pelvic ring fractures Nikita Zadneprovskiy (Moscow/RU)
15:25 OP 61	Managing soft tissue defects with computer assisted external fixators Mehmet Fatih Erol (Tekirdag/TR)
15:35 OP 62	Impact of chronic analgesic use on fracture nonunion Robert D. Zura (New Orleans, LA/US)
15:45 OP 63	Effects of an above-pain-threshold exercise in a rat model for neuropathic pain Philipp Herlyn (Rostock/DE)
15:55 OP 64	Prescription opioid use in the U.S. David Easley (Louisville, KY/US)
16:05–16:35	Closing ceremony



As a full-service PCO, we provide you with intelligent and innovative solutions in an advisory and implementing manner.



### Workshops

### Thursday, 14 September

### SawBoneLab - Circular frame hexapod and radiation-free interlocking of nails



Time 08:30–11:30 Room D 1.02

Chair Christian Zeckey (Munich/DE)

Fee free of charge

max. number of participants 18

Due to the limited number of available places, a registration is required.



3D-Surgery and Smith & Nephew GmbH present two hands-on workshops on sawbones.

### Workshop TSF:

Correcting a tibial deformity by external fixation, osteotomy and by software based correction.

© Smith & Nephew GmbH



Step 1: Describe the shape of the bone.



Step 2: Tell the software how the frame is positioned on the bone.



Step 3: Follow the daily prescription plan for the gradual adjustment.



© 3D-Surgery

## Workshop SureShot: Radiation-free distal locking of nails.



© Smith & Nephew GmbH



www.3D-Surgery.de

### Thursday, 14 September DrawingLab — Analysis and planning



Time 15:00-18:00 Room D 1.02

Chair Nikolaus Degen (Munich/DE) Fee 20 EUR (for expendable materials)

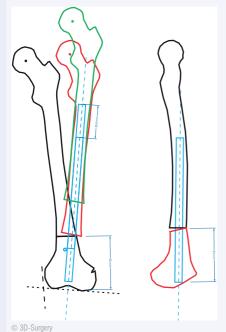
max, number of participants 20

Due to the limited number of available places, a registration is required.

The 3D-Surgery presents a popular hands-on workshop for analysis and planning of deformity corrections. The workshop will provide a hands on experience in preoperative analysis of bony deformities around the knee and planning of the correction. A clinical case of lower limb deformity is presented, and participants get instructed in analysing the deformity step by step following an established protocol (Malalignment test by Dror Paley) on a long standing radiograph.

As the origin of the deformity reveals, participants get the chance to plan the corrective operation graphically using the End Point First method. Under instruction and supervision this practical exercise conveys a systematic approach to accurate preoperative analysis and planning.

Each team (of 2 participants) is equipped with prints on transparent paper of the real size long standing radiograph and templates for the bones as well as measuring and drawing devices. The session ends with a comparison of the results of each group.







www.3D-Surgery.de

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### Friday, 15 September

### NARVISLab - Augmented reality tour

Time 15:00–16:00

Room NARVISLab, Nußbaumstraße 20 Chair Simon Weidert (Munich/DE)

Fee free of charge

max. number of participants 18

Due to the limited number of available places, a registration is required.

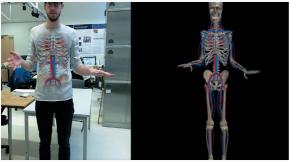


The NARVIS research group is developing computer aided medical procedures in a joint venture between the AUHP clinic of LMU Munich and the chair for Computer Aided Medical Procedures and Augmented Reality of Prof. Navab, TU Munich.

The key to success is the close collaboration between surgeons and computer scientists as well as engineers. The aim is to develop technology that helps the surgeon of the future to diagnose and treat patients more effectively and safely.

The NARVIS Augmented Reality Tour will present:

- MAGIC MIRROR (application for visualization of anatomic structures in a playful manner)
- CAM-C, AUGMENTED CIRCLES and VINTU\* ("Video-Navigated Targeting Unit" for interlocking of intra-medullary nails)
- Other interesting Applications



© NARVISI ab

MAGIC MIRROR – e.g. for educational purposes to teach anatomy.

The NARVIS research of topics are:

- Camera-Augmented Mobile C-arm (CamC)
- Head-Mounted-Display
- Surgical Simulation
- Magic Mirror

- Vibroarthrography
- 3D Printing
- Advanced Interfaces

Further information: http://campar.in.tum.de/Chair/NarvisLab



## Stability meets versatility

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For detailed product information, including indications for use, contraindications, effects, precautions and warnings, please consult the product's instructions for Use (IFU) prior to use.

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### Social and cultural programme

### Social programme

Conference dinner

Date Thursday, 14 September

Time 20:00 h

Location Restaurant "Zum Franziskaner", Hofgarten

Residenzstraße 9 | 80333 Munich

Fee 35 EUR (incl. beverages)

Enjoy a typical Bavarian evening with a tasty dinner and beer in the charming atmosphere of the traditional restaurant "Zum Franziskaner" right in the heart of Munich — a foretaste of the famous Oktoberfest!

A guided walk (appr. 20 minutes) will start at 19:30 h in front of the congress venue.

3D.ART Guided Tour

Date Wednesday, 13 September

Time 18:30 h

Location Nußbaumstraße 20 (2 minute walk)

Fee free of charge

max. number of participants 18





www.3D-Art.org

3D.ART means presenting art in context with the hospital. The Art is supposed to delight patients, staff members and visitors of the hospital. Initially in 2015 the founders and curators Wera Schnitzer and Peter H. Thaller only intended to decorate the hallway of their newly renovated outpatient clinic. Since then there was a quarterly coming and going of brilliant artists. The concept proved to be successful – there are plenty of brilliant artists to come – future exhibitions are booked already two years in advance.



© Erna Leiss - 2016 "Untitled



© RoWi Schroll – 1968 1968



© Hannes Heyn – 2017 "Masters of the Kife



© Claudia Harbauer – 2017 "Crazy Birds"

For Osteosynthese International 2017 we are proud to present Claudia Harbauer. During the meeting the exhibition will be open all day and also in the evenings.

On the first evening of the meeting we will offer offer a 3D.ART Guided Tour with Claudia Harbauer and a light drink in your hand.

### Cultural programme

Munich offers a great variety of sights and guided tours.

For all details and booking please refer to the Munich tourist office, Marienplatz 8, 80331 Munich/DE or the website www.muenchen.de.

Please find below some recommendations:

### Olympic park Munich with Olympic tower

Take a walk in the famous park and enjoy the amazing view over Munich at the top of the Olympic tower.

Opening hours Monday to Sunday, 09:00–00:00 h, last access 23:30 h Address Olympiapark | Spiridon-Louis-Ring 7 | 80992 Munich

Website www.olympiapark.de



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### Allianz Arena Munich

Visit the well-known football stadium, home of the FC Bayern München.

Opening hours Monday to Sunday, 10:00–19:00 h (non-match days)

Address Werner-Heisenberg-Allee 25 | 80939 Munich-Fröttmaning

Website www.allianz-arena.de



© Thibault Krause I wikimedia.org

### Hofbräuhaus Munich

One of Munich's oldest breweries is worth a visit!

Address Hofbräuhaus Munich | Platzl 9 | 80331 Munich

Website www.hofbraeuhaus.de



© HB 2008 | BBMC | Tobias Banzinger

### Sponsors, exhibitors and media cooperations

### Main sponsors and exhibitors Platinum sponsor > smith&nephew Smith & Nephew GmbH (Hamburg/DE) Silver sponsor Königsee Implantate GmbH (Allendorf/DE) NuVasive Germany GmbH (Gmund/DE) Bronze sponsor H & R Medizintechnik GmbH & Co. KG (Lennestadt/DE) INTERCUS GmbH (Bad Blankenburg/DE) Further sponsors OT Medizintechnik GmbH (Munich/DE) PrismaPlus GmbH (Elxleben/DE) Stryker GmbH & Co. KG (Duisburg/DE) Exhibitors (numerical) Booth number INTERCUS GmbH 2 Königsee Implantate GmbH NuVasive Germany GmbH 3 4

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### Media cooperations

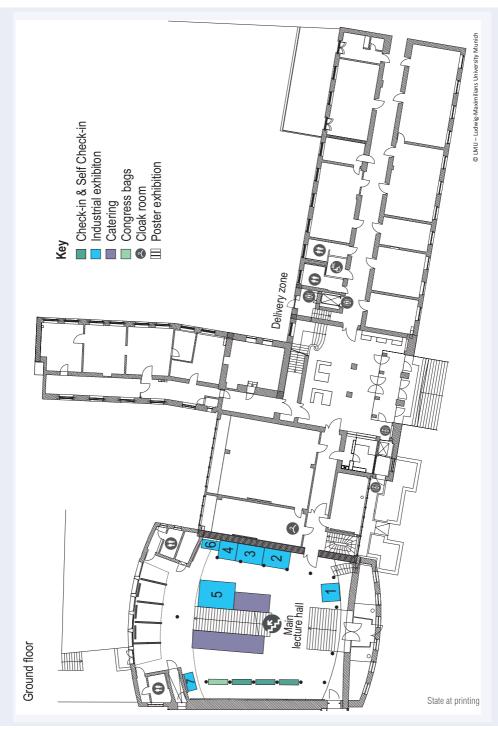
OT Medizintechnik GmbH

Dr. R. Kaden Verlag GmbH & Co. KG (Heidelberg/DE)

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State at printing

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### General information



### Registration

Registration for the congress is required. Please register online at www.osteosynthese2017.de.

### Fees full congress

REGULAR

(from 14 July 2017)

Members\* 300 EUR

Non-members 350 EUR
Assistant physician/surgeon\*\* 150 EUR
Students/Physiotherapists 100 EUR

Participants EORS Congress 80 EUR (day ticket)

Conference dinner35 EURDrawingLab20 EURSawBoneLabfree of chargeNARVISLabfree of charge

- \* Please provide a proof of membership via fax +49 3641 31 16-244 or e-mail and quote GKS 2017.
- \*\* Please provide proof of status via fax +49 3641 31 16-244 or e-mail registration@conventus.de and quote GKS 2017.



### Payment and confirmation of payment

An invoice or confirmation of registration will be sent to you via postal or electronic mail within 14 days. This invoice is a valid invoice which may be submitted to the local tax and revenue office. All fees are due upon receipt of invoice/registration confirmation. Payment transfers must include participant's name and invoice number. Payment is also accepted by credit card (Master-/Eurocard, American Express, VISA). Should you transfer your invoice amount within 10 days of the start of the event, please present your transfer remittance slip on-site.

The registration fees include:

- Admission to all scientific sessions and access to our industrial exhibition
- Opening ceremony
- Congress materials (congress bag, final programme, name badge)



### General terms and conditions

Please find our general terms and conditions at www.osteosynthese2017.de.



### Certification

... for participants from Germany

The Osteosynthese International 2017 has applied for certification (CME credits) of the scientific programme at the Medical Chamber of Bavaria.

... for participants from Austria and from Switzerland

The assigned points of certification by the Medical Chamber of Bavaria will be accepted by your authorised Medical Chamber

... for participants from other countries

The Osteosynthese International 2017 has applied for certification (ECMEC points) at the European Accreditation Council for Continuing Medical Education (EACCME). The EACCME is an institution of the European Union of Medical Specialists (UEMS), www.uems.net.



#### Proof of attendance

For certification you must provide proof of attendance. Therefore, please sign and add your bar code to the list at the check-in desk on-site every day at the congress.



### General certificate of attendance

Certificates of attendance will first be made available on the last day of the congress at the check-in desk.



### Name badge

Please wear your name badge during all congress events, including the networking activities. Admission to scientific sessions and to the industrial exhibition is restricted to participants wearing their badge. Participants will receive their name badge at the check-in desk.



### Check-in

The check-in desk is located on ground floor.



### Opening hours

	Weullesuay	Hiursuay	TTIUay
Check-in	11:00-18:30 h	07:30-19:30 h	07:30-17:00 h
Media check-in	11:00-18:00 h	07:30-18:00 h	07:30-16:00 h
Industrial exhibition	12:00-17:00 h	09:00-17:00 h	09:00-15:00 h
Poster exhibition	11:00-18:00 h	08:30-18:00 h	08:30-15:00 h



#### WIFI access

WIFI is available for free throughout the whole congress venue. Please ask at the check-in desk for the login data.



### Congress language

The congress language is English.

### General hints for authors and presenters

### Submission of a presentation/Technical information

The presentation should be prepared as PDF, MS Office PowerPoint for Windows or key for Macintosh DVD in format 4:3.

A presentation notebook with a PDF reader and MS Office PowerPoint will be provided. The use of personal notebooks is possible upon agreement. However, it may interrupt the flow of the programme in the lecture hall. Please provide an adapter for VGA if necessary. To guarantee a smooth running programme please upload your presentation in due time — at least 2 hours before your presentation is due to start. Should you wish to use non-digital equipment, please contact us at osteosynthese2017@conventus.de.

### Presentation upload

The media check-in for uploading your presentation is located in the lecture hall. Please submit your presentation at least 120 minutes before the start of your presentation.

For submission, please use a USB flash drive, CD or DVD disc that is not protected by any software. Professional staff and equipment will be available for you to arrange and preview your presentation.

### Time allocation

Please prepare your presentation for the allotted amount of time. Chairs and moderators may interrupt should you overrun your time limit.

Allotted time is assigned as follows (speaking + discussion time):

Oral presentation 8+2 minutes
Poster presentation 3+2 minutes

### Poster session

The posters will be presented during a guided poster session which is scheduled on Thursday, 14 September from 12:30–13:30 h. Therefore, we kindly ask you to be present at your poster during the poster session, for presentation, discussion and questions. Please prepare your poster in English in accordance to format DIN A0 (84,1 cm x 118,9 cm) and of vertical format. Pins will be provided on your poster board. Please do not use any other type of pins than those provided. All poster boards will be labelled with a poster number. You can find your poster number in the programme book. Please note that all posters should be hung by Thursday, 14 September by 11:00 hrs at the latest and be removed, at the latest, by Friday, 15 September, 15:00 hrs. Posters that have not been removed by the said time will be considered as waste.

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