

Gerhard Küntscher Society  
Annual Meeting

**Prof. Dr. med. Dr. h. c. Wilhelm Friedl**



# Osteosynthese International 2016

**osteosynthese2016.de**

© Kongress- und Touristikbetriebe der Stadt Aschaffenburg

22-24 SEPTEMBER 2016 | ASCHAFFENBURG

# PROGRAMME

# Programme overview

Thursday, 22 September	Friday, 23 September		Saturday, 24 September
Cranach-Saal	Cranach-Saal	Tagungszentrum	Cranach-Saal
	<p>08:30–10:30</p> <p><b>Session III</b> Nail vs. plate vs. prosthesis: humerus</p> <p>p. 15</p>		
	<p>11:00–12:30</p> <p><b>Session IV</b> Nail vs. plate vs. prosthesis: wrist and forearm</p> <p>p. 16</p>		<p>09:30–11:00</p> <p><b>Session VII</b> Today's place of ExFix fracture management in primary care, definitive treatment and complication management</p> <p>p. 20</p>
<p>13:30–15:30</p> <p><b>Session I</b> Nail vs. plate vs. prosthesis: tibia</p> <p>p. 8</p>		<p>13:00–14:00</p> <p><b>Corporate workshop</b></p> <p>p. 24</p>	<p>11:30–13:50</p> <p><b>Session VIII</b> Complication management after infection and pseudarthrosis</p> <p>p. 21</p>
	<p>14:30–16:00</p> <p><b>Session V</b> Nail vs. plate vs. prosthesis: distal lower leg, pilon and ankle fractures</p> <p>p. 17</p>		<p>13:50–14:20</p> <p><b>Closing ceremony</b></p>
<p>16:00–16:30</p> <p><b>Opening ceremony</b></p>			
<p>16:30–18:30</p> <p><b>Session II</b> Nail vs. plate vs. prosthesis: femur</p> <p>p. 9</p>			
<p>18:30–19:30 <b>Poster session</b></p>	<p>16:30–18:30</p> <p><b>Session VI</b> Nail vs. plate vs. prosthesis: patella, olecranon, proximal metatarsus V, shoulder girdle and peri-implant fractures</p> <p>p. 18</p>		
<p>19:30</p> <p><b>Welcome reception</b></p> <p>p. 26</p>	<p>18:30–19:30</p> <p><b>Assembly of members</b> Gerhard Küntscher Society</p>		
	<p>19:30 <b>Gala dinner</b> (Ridingersaal, Schloss Aschaffenburg)</p> <p>p. 26</p>		

Organisation and imprint .....	4
Gerhard Küntscher Society and Reviewing committee .....	5
Welcome note .....	6
Scientific programme	
Thursday, 22 September .....	8
Friday, 23 September .....	15
Saturday, 24 September .....	20
Floor and exhibition plan .....	23
Corporate workshop • Exhibitors .....	24
Sponsors • Media cooperations .....	25
Social and cultural programme .....	26
General information .....	28
General hints for authors and presenters .....	33
Index of authors and chairs .....	34

# Organisation and imprint

## Venue

Stadthalle am Schloss Aschaffenburg  
Schloßplatz 1  
63739 Aschaffenburg/DE

## Date

22–24 September 2016

## Congress website

[www.osteosynthese2016.de](http://www.osteosynthese2016.de)

## Hosting society

Gerhard Küntscher Society  
[www.kuentschersociety.org](http://www.kuentschersociety.org)

## Congress president

Prof. Dr. med. Dr. h. c. Wilhelm Friedl  
Klinikum Aschaffenburg/Chirurgische Klinik II – Unfallchirurgie  
Am Hasenkopf  
63739 Aschaffenburg/DE

## 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  
[osteosynthese2016@conventus.de](mailto:osteosynthese2016@conventus.de) • [www.conventus.de](http://www.conventus.de)

## Design/Layout

Layout krea.tif-studio UG (haftungsbeschränkt)  
Editorial deadline 22 July 2016



## Gerhard Küntscher Society • Board members

Jan Verbruggen, President  
Maastricht University Medical Center  
(Maastricht/NL)

Georg Gradl, Vice President  
Klinikum München Harlaching  
(Munich/DE)

Anica Eschler, Secretary  
University of Rostock  
(Rostock/DE)

Rüdiger Haase, Treasurer  
Krankenhaus Bethel Berlin  
(Berlin/DE)

Kemal Aktuglu  
University of Ege  
(Izmir/TR)

Roland Biber  
Klinikum Nürnberg  
(Nuremberg/DE)

Peter Giannoudis  
Leeds General Infirmary Chapel Allerton Hospital  
(Leeds/GB)

Mattheos Savvidis  
General Military Hospital of Thessaloniki  
(Thessaloniki/GR)

David Seligson  
University of Louisville  
(Louisville, KY/US)

Robert D. Zura  
LSU Health New Orleans  
(New Orleans, LA/US)

## Gerhard Küntscher Society • Associated board members

Wilhelm Friedl  
Klinikum Aschaffenburg  
(Aschaffenburg/DE)

Peter H. Thaller  
Ludwig Maximilians University  
(Munich/DE)

Peter Reynders  
University Hospital Brugmann  
(Brussels/BE)

## Osteosynthese International 2016 • Reviewing committee

Volk Alt (Giessen/DE)  
Volker Bühren (Murnau/DE)  
Kemal Durak (Izmir/TR)  
Axel Ekkernkamp (Berlin/DE)  
Wilhelm Friedl (Aschaffenburg/DE)  
Martin Kloub (Geske Budejovice/CZ)  
Rainer H. Meffert (Würzburg/DE)  
Dietmar Pennig (Cologne/DE)

Florin Ramadani (Wels/AT)  
Pol M. Rommens (Mainz/DE)  
David Seligson (Louisville, KY/US)  
Paul-Dan Sîrbu (Iasi/RO)  
Alfred Steindl (St. Pölten/AT)  
Peter H. Thaller (Munich/DE)  
Jan Verbruggen (Maastricht/NL)  
Robert D. Zura (New Orleans, LA/US)

## Welcome note



Dear colleagues,  
Dear friends of the Gerhard Küntscher Society,

The Küntscher Society is an internationally active society that originated from a group of enthusiastic and keen Küntscher students dedicated to fracture treatment with intramedullary nailing. Today Osteosynthesis international is promoting all forms of osteosynthesis and fracture care. Due to the increasingly aging population in industrial countries on the one hand and the growing mobility and physical activity of younger people on the other hand, the number of patients with bone fractures has risen continuously. New questions regarding anchoring and load stability together with the development of adequate implants for the individual skeletal regions have been moved into the center of attention.

In case of shaft fractures locking nail osteosynthesis is by far the most common procedure, whilst for fractures of the meta- and epiphyseal area the trend appears to go towards alternative treatment. Type A fractures and simple slightly displaced C fractures are usually treated with anatomically adapted intramedullary nails, multi-fragment fractures are commonly treated using locking plates and highly complex fractures using endoprosthesis.

The importance of treatment choice for the different skeletal regions is still subject for discussions. For this reason, we chose as main topic of the 2016 congress to analyse and discuss today's therapeutic concepts and techniques for all long bones and other anatomic areas. Eight scientific meetings and workshops are on the agenda.

It is our particular intention to pass on this knowledge to the following generation of trauma and orthopaedic surgeons. This is why we also like to encourage doctors in training to participate in this congress since it offers a compact form of knowledge acquisition.

Physiotherapy and rehabilitation professionals are highly welcome to our congress.

We therefore invite you to come to Aschaffenburg from 22–24 September 2016. The city is rich in history and culture and used to be former summer residence for Bishops of Mainz. Frankfurt Airport is only 50 km away and easy to get to.

Best regards

Handwritten signature of Wilhelm Friedl in black ink.

Prof Dr. Dr. h.c. Wilhelm Friedl  
Congress president 2016

Handwritten signature of Jan Verbruggen in black ink.

Dr. Jan Verbruggen  
President Gerhard Küntscher Society (GKS)



# Did you know?

**Conventus is the Professional Congress Organiser  
of the Osteosynthese International 2016\***

\* Annual Meeting of the Gerhard Küntscher Society

**conventus**  
CONGRESSMANAGEMENT

## Scientific programme • Thursday, 22 September

from 08:00	Registration
13:00–13:30	Lunch break and reception
13:30–15:30	Session I – Nail vs. plate vs. prosthesis: tibia
Room	Cranach-Saal
Chairs	Rainer H. Meffert (Würzburg/DE) Robert D. Zura (New Orleans, LA/US)
13:30	Tibiahead fractures
IL01	Rainer H. Meffert (Würzburg/DE)
13:45	Tibiashaft fractures
IL02	Robert D. Zura (New Orleans, LA/US)
14:00	How choice of implant used for fracture fixation of long bones affects fracture healing?: a new fracture-healing matrix is proposed
OS1-01	Rajat Varma (London/GB)
14:15	Fracture fixation in osteoporotic long bone fractures
OS1-02	Rajat Varma (London/GB)
14:30	Management of musculoskeletal injuries secondary to gunshot
OS1-03	<u>Rabun Fox</u> , R. D. Zura (New Orleans, LA/US)
14:40	Tibial head depression fractures in elderly – a biomechanical study of different treatment options
OS1-04	<u>Stefanie Hölscher-Doht</u> , M. C. Jordan, L.-C. Faerber, H. Jansen, S. P. Frey, T. Blunk R. H. Meffert (Würzburg/DE)
14:50	Simultaneous nailing of the ipsilateral femur and tibia fractures – the up down nail
OS1-05	<u>Ronald Auer</u> , D. Seligson, J. Riehl (Louisville, KY/US)
15:00	Intramedullary nailing of tibial fractures – results and complications
OS1-06	<u>Gheorghe Tomoaia</u> , C. Bardas, H. Benea, M. Paiusan, D. Oltean, G. Zsolt R. Tomoaia, C. Dan (Cluj-Napoca/RO)
15:10	Comparative results of tibial fractures treatment
OS1-07	<u>Andriy Kalashnikov</u> (Kiev/UA), V. Malyk (Poltava/UA), Y. Stavinskyi (Kiev/UA)
15:20	The treatment of the leg fractures using internal medullar nail implants: retrospective study
OS1-08	D. Calin, <u>Dan Grecu</u> , A. Grecu, C. Prica, M. Sarbu, W. Shaban (Craiova/RO)



## Scientific programme • Thursday, 22 September

15:30–16:00	Coffee break
Room	Industrial exhibition
16:00–16:30	Opening ceremony
Room	Cranach-Saal
16:00	Welcome address Jan Verbruggen (Maastricht/NL) President of the Gerhard Küntscher Society
16:10	Welcome address Wilhelm Friedl (Aschaffenburg/DE) Congress president Osteosynthese International 2016
16:20	Welcome address Klaus Herzog (Aschaffenburg/DE) Mayor of Aschaffenburg
16:30–18:30	Session II – Nail vs. plate vs. prosthesis: femur
Room	Cranach-Saal
Chairs	David Seligson (Louisville, KY/US) Alfred Steindl (St. Pölten/AT)
16:30	Proximal femur fractures
IL03	Alfred Steindl (St. Pölten/AT)
16:45	Femur shaft and supracondylar fractures
IL04	David Seligson (Louisville, KY/US)
17:00	The clinical results of the dynamic locking blade plate in the fixation of undisplaced and displaced femoral neck fractures
OS2-09	<u>Ariaan van Walsum</u> (Enschede/NL), W. Roerdink (Deventer/NL) J. Vroemen (Breda/NL), H. Janzing (Venlo/NL), T. Winkelhorst (Nijmegen/NL)
17:10	Blade type nail designs cause more varus collapse than screw type nails in the treatment of elderly trochanteric fractures
OS2-10	<u>Mustafa Caner Okkaoglu</u> , H. Sesen, I. Demirkale, M. Ozdemir, Y. Okkaoglu M. Altay (Ankara/TR)

## Scientific programme • Thursday, 22 September

- 17:20  
OS2-11      Subtrochanteric femoral fractures treated with the Long Gamma3®nail:  
a historical control case study versus Long trochanteric Gammanail®  
D. Georgiannos, Matthaios Savvidis, V. Lampridis, I. Bisbinas, D. Kapoutsis  
A. Konstandinidis, G. Gkouvas (Thessaloniki/GR)
- 17:30  
OS2-12      Rotation instability and micro-movements are independent prognosis factors  
for the failure rate of dislocated medial femoral neck fractures  
Alfonso Alias-Petralanda (Aschaffenburg/DE)
- 17:40  
OS2-13      Cut out rates in trochanteric fracture nailing can be reduced by the I-Beam  
profile of the femoral neck component of the gliding nail (GN)  
Tim Arnold, W. Friedl (Aschaffenburg/DE)
- 17:50  
OS2-14      Nonunion and unplanned reoperation rates in adult proximal femoral fracture:  
a meta-analysis  
Riikka Nomides (Durham, NC/US), R. D. Zura (New Orleans, LA/US)  
R. G. Steen (Durham, NC/US)
- 18:00  
OS2-15      Lateral cortical notching in specific cases of delayed unions or nonunions after  
intertrochanteric and reversed fractures  
Roland Biber, H. J. Bail, H.-W. Stedtfeld (Nuremberg/DE)
- 18:10  
OS2-16      Risk factors for cut-out of double lag screw fixation in proximal femoral fractures  
K. Buyukdogan, Omur Caglar, S. Isik, C. Aksoy, M. Tokgozoglu, B. Attila (Ankara/TR)
- 18:20  
OS2-17      Liss plate versus intramedullary nail for femur shaft fractures with polytrauma  
K. Durak, Gokay Eken, A. Durak (Bursa/TR)

- 18:30–19:30 **Guided poster session**  
Room Foyer Cranach-Saal  
Chairs Peter Hinz (Greifswald/DE) (P01–P14)  
Ulrich Göhring (Aschaffenburg/DE) (P15–P29)
- P01 Functional analyses after tibial shaft fracture  
J. Lackner, R. Pätzold, I. Kröger, A. Brand, I. Klöpfer-Krämer, Peter Augat (Murnau/DE)
- P02 Evaluation of stress distribution on proximal locking screw position in new designed proximal femoral nail (MNP) using optimised finite element analysis  
Mehmet Nuri Konya, O. Verim (Afyonkarahisar/TR)
- P03 Femoral insufficiency fractures related to long term bi-phosphonate use and femoral deformity – three cases  
Mehmet Akdemir, A. Ç. Biçen, A. C. Turan, M. A. Türken, A. Alper, A. Ekin (Izmir/TR)
- P04 Is the tip apex distance a predictor of failure in intertrochanteric hip fractures treated with proximal femoral nail?  
Kemal Kayaokay, N. Ozkayin, M. C. Sozbilen, B. Ozcanyuz, J. Mirzazade K. Aktuglu (Izmir/TR)
- P05 Accuracy of distal long femur nail locking with different techniques  
Vecihi Kirdemir, Ö. Başal, T. Atay, Y. B. Baykal (Isparta/TR)
- P06 Bundle nailing in proximal fractures of the humerus in the osteoporotic elderly  
Hendrik Jansen, M. Jordan, F. Gilbert, R. H. Meffert (Würzburg/DE)
- P07 Distal radio-ulnar joint inclination affects postoperative functional result after ulnar shortening osteotomy, a retrospective cohort analysis  
Fabian Gilbert, R. H. Meffert, M. Jakubietz, J. Erdmann, R. Jakubietz (Würzburg/DE)
- P08 Osteosynthesis in metastatic bone lesions of limbs  
Volodymyr Protsenko, O. Ilnitskyi, V. Chorneyi (Kiev/UA)
- P09 The anterior intrapelvic approach to the acetabulum  
D. Seligson, Ken MacKinlay, B. Houseman (Louisville, KY/US)

- P10      Posterior bridging osteosynthesis for traumatic sacroiliac joint dislocation: a report of seven cases  
Etienne Hoffmann (Osny/FR)
- P11      Outcome of surgical treatment of posterior wall and posterior column fractures of acetabulum  
Adam Mahendra Teja, R. C. Banshiwal, M. K. Yadav (Jaipur/IN)
- P12      The preferred orientation for screw fixation of the calcaneal tuberosity  
D. Seligson, Sam Gracey (Louisville, KY/US)
- P13      The use of collagen tripeptide, chitosan and hyaluronic acid based hydrogel for posterolateral lumbar spine fusion  
Serhat Gafur Karaca (Istanbul/TR), S. Patir (Frankfurt a. M./DE)
- P14      Posterolateral spinal fusion with collagen tripeptide based hydrogel  
Serhat Gafur Karaca (Istanbul/TR), S. Patir (Frankfurt a. M./DE)
- P15      Periprosthetic fractures around the femoral stem-biologic decisions  
Dian Enchev, M. Rashkov, A. Baltov, M. Markov, S. Assiov (Sofia/BG)
- P16      Should we still arthrodesis the knee after retrieving an infected knee prosthesis  
Peter Reynders-Frederix, C. Reynders-Frederix (Brussels/BE)
- P17      Dislocation of knee prosthesis and treatment with Osteobridge™ arthrodesis system  
Mehmet Akdemir, M. A. Türken, A. Arıkan, A. C. Turan, A. Ç. Biçen  
A. Ekin (Izmir/TR)
- P18      The analysis of traffic accidents in Uludag University Medical Faculty Emergency Service between 2011–2013, Bursa  
Vahide Aslıhan Durak, M. N. Ural, E. Bayraktar, M. S. Gürses, K. Durak  
D. Durak (Bursa/TR)
- P19      Evaluation of efficacy and complications of chevron osteotomy with k-wire fixation for Hallux valgus correction  
Muhammad Baig (Tralee/IE)

- P20 Implant removal – patients' expectations and surgeons' concerns  
Anna Lena Drissner, T. Völler, T. Mittlmeier, R. Rotter, A. Wichelhaus  
P Gierer (Rostock/DE)
- P21 Three-dimensional polymer coated 45S5-type bioactive glass scaffolds seeded with human mesenchymal stem cells show bone formation in-vivo  
F. Westhauser, Matthäus Prokscha, C. Weis (Heidelberg/DE), W. Li (Erlangen/DE)  
U. Kneser (Ludwigshafen/DE), H.-U. Kauczor, G. Schmidmaier (Heidelberg/DE)  
A. R. Boccaccini (Erlangen/DE), A. Moghaddam (Heidelberg/DE)
- P22 Treatment of bone and soft tissue infections and sepsis due to war injuries including polytrauma  
Mehmet Akdemir, A. Erbay, A. C.Turan, M. A. Türken, A. Arkan  
A. Ç. Biçen A. Ekin (Izmir/TR)
- P23 Comparison of the reliability of three methods for the assessment of the lower limb length – eos with new micro-dose protocol vs. long-standing radiograph vs. CT scanogram  
Burak Abay, M. F. Erol, M. Kücükaya, B. Abay (Istanbul/TR)
- P24 Impact of medication use on fracture nonunion in human bones – analysis of a payer database of ~90.1 million patients  
R. G. Steen, Z. Xiong, T. Einhorn, J. T. Watson, M. J. Prayson, G. J. Della Rocca  
T. McKinley, S. Mehta, Z. Wang, Robert D. Zura (New Orleans, LA/US)
- P25 Assessment of low-intensity pulsed ultrasound on fracture healing as used in a Level -1 trauma centre  
Adanna Welch-Phillips, C. Kennedy, J. Harty, M. Athar (Cork/GB)
- P26 The effectiveness of transforaminal versus caudal routes for epidural steroid injections in managing lumbosacral radicular pain – a systematic review and meta-analysis  
Jun Liu, H. Zhou, L. Lu, S. Feng (Tianjin/CN)
- P27 Alcohol involvement in traumatic fatal injuries  
Vahide Aslıhan Durak, M. Kocaman, T. Aydoğan, D. Durak (Bursa/TR)

## Scientific programme • Thursday, 22 September

- P28      Is Fetuin-A serum concentration a predictor of long-term outcome after proximal femur fracture in osteoporotic patients?  
Philipp Herlyn, C. Steffen, N. Cornelius, T. Mittlmeier, D.-C. Fischer (Rostock/DE)
- P29      MMP-8 and MMP-9 serum levels as possible early markers for remission after traumatic spinal cord injury  
Raban Heller, V. Daniel, T. Swing, M. Akbar, H. J. Gerner (Heidelberg/DE)  
B. Biglari (Ludwigshafen/DE), A. Moghaddam (Heidelberg/DE)
- 19:30      [Welcome reception](#)  
Room      Industrial exhibition

08:30–10:30	<b>Session III – Nail vs. plate vs. prosthesis: humerus</b>
Room	Cranach-Saal
Chairs	Axel Ekkernkamp (Berlin/DE) Martin Kloub (Ceske Budejovice/CZ)
08:30	Proximal humerus and shaft fractures
IL06	Martin Kloub (Ceske Budejovice/CZ)
08:45	Distal humerus fractures
IL07	Nikolai Spranger (Berlin/DE)
09:00	Treatment of proximal humeral fractures in Germany – a representative survey
OS3–18	<u>Tobias Harnob</u> (Kempten/DE), M. Weigl, U. Schreiber (Munich/DE) G. Täger (Kempten/DE), A. Lenich (Munich/DE)
09:10	Proximal humeral fractures – mechanisms of failure and trouble-shooting
OS3–19	Rüdiger Haase (Berlin/DE)
09:20	Is it safe to assist proximal humeral nailing to residents? – an analysis of 1134 cases
OS3–20	<u>Roland Biber</u> , B. Altintas, H. J. Bail (Nuremberg/DE)
09:30	Experimental examination of factors influencing the deformation cut out risk in locked nail osteosynthesis of proximal humerus fractures
OS3–21	<u>Stefan Fleckenstein</u> , W. Friedl (Aschaffenburg/DE), M. Rinner (Aarau/CH)
09:40	Complication analysis of the Targon® PH nail
OS3–22	<u>Hermann Josef Bail</u> , B. Altintas, B. Zirngibl, M. Curschmann-Horter R. Biber (Nuremberg/DE)
09:50	Humeral head necrosis after proximal humeral nailing – What are the reasons for bad outcome?
OS3–23	<u>Hermann Josef Bail</u> , B. Zirngibl, R. Biber (Nuremberg/DE)
10:00	Intramedullary nail vs. dynamic compression plate in treating humeral shaft fractures
OS3–24	<u>Ciprian Bardas</u> , H. Benea, D. Oltean, M. Paiusan, R. Tomoaia, A. Bardas G. Tomoaia (Cluj-Napoca/RO)

## Scientific programme • Friday, 23 September

- 10:10  
OS3–25      Minimally invasive plate osteosynthesis by anterior approach – an alternation in distal humeral shaft fractures produced by arm wrestling  
Paul-Dan Sîrbu, G. Berea, R. Asaftei, R. Tudor, R. Sova, A. Bodescu (Iasi/RO)
- 10:20  
OS3–26      New multidirectional angular stable plate fixation in transcondylar humerus fractures – trochilus plate  
Athanasios Terzis, W. Friedl (Aschaffenburg/DE)
- 10:30–11:00  
Room      **Coffee break**  
Industrial exhibition
- 11:00–12:30  
Room      **Session IV – Nail vs. plate vs. prosthesis: wrist and forearm**  
Cranach-Saal  
Chairs      Kemal Durak (Izmir/TR)  
Jan Verbruggen (Maastricht/NL)
- 11:00  
IL07      Radial head and forearm fractures  
Levent Küçük (Izmir/TR)
- 11:15  
IL08      Distal radius and distal ulna fractures  
Jan Verbruggen (Maastricht/NL)
- 11:30  
OS4–27      Classification, treatment and clinical results of the Monteggia like lesion in 28 patients  
Lars Eden, D. Ziegler, H. Jansen, R. H. Meffert (Würzburg/DE)
- 11:40  
OS4–28      Locking plates or locking internal nail in distal radius fractures – an experimental examination and phase I clinical study  
Leonard Höchtl-Lee, W. Friedl (Aschaffenburg/DE)
- 11:50  
OS4–29      Outcome of conservative versus volar locking plate osteosynthesis for unstable distal radius fractures – a comparative study  
Adam Mahendra Teja, R. C. Banshiwal (Jaipur/IN)
- 12:00  
OS4–30      Treatment of multifragmentation fractures of the distal extremity of the radius with dorsal displacement (C type)  
Bogdan Gogulescu (Galati/RO)



- 12:10 OS4-31 The Amsterdam wrist rules, an implementation study  
Marjolein Mulders (Amsterdam/NL), M. Walenkamp (Rotterdam/NL)  
 J. C. Goslings (Amsterdam/NL), N. Schep (Rotterdam/NL)
- 12:20 OS4-32 Long-term functional outcomes after corrective osteotomy of distal radius malunions  
Marjolein Mulders, P. d'Ailly (Amsterdam/NL), B. Cleffken, N. Schep (Rotterdam/NL)
- 12:30–14:30 **Lunch break**  
 Room Industrial exhibition
- 13:00–14:00 **Corporate workshop**  
 (for details see p. 24)  
 Room Tagungscenter
- 14:30–16:00 **Session V – Nail vs. plate vs. prosthesis: distal lower leg, pilon and ankle fractures**  
 Room Cranach-Saal  
 Chairs Wilhelm Friedl (Aschaffenburg/DE)  
 Paul-Dan Sîrbu (Iasi/RO)
- 14:30 IL09 Ankle, pilon and distal lower leg fractures  
 Wilhelm Friedl (Aschaffenburg/DE)
- 14:50 OS5-33 Surgical treatment of distal tibia fractures with intra-medullary nail  
Cosmin Faur, B. Anglitoiu, M. Oprea, D. V. Poenaru (Timisoara/RO)
- 15:00 OS5-34 Comparison of plate versus intra-medullary nail fixation for distal tibia fractures without articular involvement  
Murat Celal Sozbilen, G. Hatami, K. Kayaokay, O. Suer, N. Ozkayin  
 K. Aktuglu (Izmir/TR)
- 15:10 OS5-35 Biomechanical analysis of three fixation methods in treatment of pilon fractures AO 43-C3  
 B. Puha, T. S. Gheorghievici, E. Carata (Iasi/RO), W. Friedl (Aschaffenburg/DE)  
 S. Rares, Paul-Dan Sîrbu (Iasi/RO)
- 15:20 OS5-36 Complications associated with lateral malleolus plate fixation in ankle fractures  
 Dinu Vermesan, R. Prejbeanu, H. Haragus, D. V. Poenaru (Timisoara/RO)

## Scientific programme • Friday, 23 September

- 15:30  
OS5-37 Interlocking nailing in intraarticular calcaneal fractures – a biomechanical cadaver study of two different interlocking nails vs. an interlocking plate  
Thomas Mittlmeier, S. Reinhardt (Rostock/DE), B. Ulmar (Ulm/DE)  
H. Martin (Rostock/DE), M. Richter (Schwarzenbruck/DE)  
M. Pompach (Pardubice/CZ), S. Döbele (Tübingen/DE), H. Zwiipp  
S. Rammelt (Dresden/DE)
- 15:40  
OS5-38 A new minimally-invasive applied locking nail for displaced intraarticular calcaneal fractures-results after 1 year  
Anica Eschler, A. Brakelmann, T. Mittlmeier (Rostock/DE), G. Gradl (Munich/DE)
- 15:50  
OS5-39 Percutaneous stable fixation of V-Metatarsal avulsion and Jones fractures  
Tim Arnold, W. Friedl (Aschaffenburg/DE)
- 16:00–16:30 **Coffee break**  
Room Industrial exhibition
- 16:30–18:30 **Session VI – Nail vs. plate vs. prosthesis: patella, olecranon, proximal metatarsus V, shoulder girdle and peri-implant fractures**  
Room Cranach-Saal  
Chairs Volker Bühren (Murnau/DE)  
Pol Rommens (Mainz/DE)
- 16:30  
IL10 Overview lecture – patella fractures  
Volker Bühren (Murnau/DE)
- 16:45  
IL11 Overview lecture – olecranon fractures  
Pol Rommens (Mainz/DE)
- 17:00  
OS6-40 Olecranon osteotomy – stable compression with the XS nail osteosynthesis  
Ulrich Göhring, W. Friedl (Aschaffenburg/DE)
- 17:10  
OS6-41 XS nail osteosynthesis – fifteen years of experience with fractures of the olecranon and proximal ulna  
Ulrich Göhring, W. Friedl (Aschaffenburg/DE)
- 17:20  
OS6-42 Tension fractures of the patella – long term results of the XS nail  
Leonard Höchtl-Lee, W. Friedl (Aschaffenburg/DE)
- 17:30  
OS6-43 Floating shoulder or floating shoulder girdle  
Asen Baltov, M. Rashkov, D. Enchev (Sofia/BG)

- 17:40  
OS6-44 Outcome after revision surgery of aseptic clavicle non-union  
Christian von Räden, J. Friedrichs (Murnau/DE), M. Morgenstern (Basel/CH)  
P. Augat, S. Hackl, A. Woltmann, V. Bühren (Murnau/DE), C. Hierholzer (Zürich/CH)
- 17:50  
OS6-45 Isolated, overlooked, traumatic, symptomatic scapular spine fractures  
U. Kanatlı, Tacettin Ayanoğlu, M. B. Ataoğlu (Ankara/TR), M. Ozer (Konya/TR)  
M. Çetinkaya (Ankara/TR)
- 18:00  
OS6-45 Filipov's method of biplane double-supported screw fixation extremely reduces the risk of fixation failure in femoral neck fractures – clinical outcomes in 207 patients  
Orlin Filipov (Sofia/BG), B. Gueorguiev (Davos/CH), K. Stoffel (Basel/CH)  
C. Sommer (Chur/CH)
- 18:10  
OS6-46 Peri-implant femoral fractures – the risk is more than three times higher within PFN compared with DHS  
Franz Müller, M. Galler, B. Füchtmeier (Regensburg/DE)
- 18:20  
OS6-47 Periimplant femur fractures after short hip nailing – the impact of non-locked nails  
Jiri Skala-Rosenbaum, V. Dzupa, P. Dousa, R. Bartoska (Prague/CZ)
- 18:30–19:30  
Room [Assembly of members of the Gerhard Küntscher Society](#)  
Cranach-Saal
- 20:00  
[Gala dinner](#)  
for details see p. 26

## Scientific programme • Saturday, 24 September

09:30–11:00	<b>Session VII – Today's place of ExFix fracture management in primary care, definitive treatment and complication management</b>
Room	Cranach-Saal
Chairs	Dietmar Pennig (Cologne/DE) Peter H. Thaller (Munich/DE)
09:30 IL12	Today's place of ExFix fracture management in primary care, definitive treatment and complication management in a developed health care environment Dietmar Pennig (Cologne/DE)
09:45 IL13	Today's place of ExFix fracture management in primary care, definitive treatment and Complication management in a developing health care environment Paul-Dan Sîrbu (Iasi/RO)
10:00 OS7-49	Indication and techniques of distal radius fixation with plate, nail and ExFix <u>Georg Gradl</u> (Munich/DE), N. Mielsch, M. Wendt, S. Falk, T. Mittlmeier P. Gierer (Rostock/DE), G. Gradl (Aachen/DE)
10:10 OS7-50	Minimal-invasive treatment of adolescent proximal fractures of the tibia by external fixation <u>Hendrik Jansen</u> , K. Fehske, M. Jordan, R. H. Meffert (Würzburg/DE)
10:20 OS7-51	Software-based Ortho-SUV frame in children long-bone deformities correction: analysis of 162 cases <u>Victor Vilensky</u> , A. Pozdeev, E. Zakharyan (St. Petersburg/RU)
10:30 OS7-52	Treatment of femur osteomyelitis with shortening in tree steps and usage of both external fixators and internal fixator <u>Mehmet Akdemir</u> , M. A. Türken, A. Arıkan, A. Erbay, A. C. Turan, A. Ç. Biçen A. Ekin (Izmir/TR)
10:40 OS7-53	Multiplanar external fixation in tibia open fractures (by using a couple of external fixators) Bogdan Gogulescu (Galati/RO)
10:50 OS7-54	The special entity – implant-associated, chronic, destructive osteomyelitis of the humerus – complex therapy options and outcome Thomas von Stein (Murnau/DE)
11:00–11:30 Room	<b>Coffee break</b> Industrial exhibition

11:30–13:30	<b>Session VIII – Complication management after infection and pseudarthrosis</b>
Room	Cranach-Saal
Chairs	Florin Ramadani (Wels/AT) Peter H. Thaller (Munich/DE)
11:30	Complication management after infection
IL14	Florin Ramadani (Wels/AT)
11:45	Complication management after pseudarthrosis
IL15	Volker Alt (Giessen/DE)
12:00	Use of Masquelet technique in treatment of septic and atrophic non-union
OS8-55	<u>Arash Moghaddam</u> , C. Ermisch, G. Schmidmaier (Heidelberg/DE)
12:10	The epidemiology of fracture nonunion in 18 human bones – analysis of a payer database of ~90.1 million patients
OS8-56	<u>Robert D. Zura</u> , Z. Xiong, T. Einhorn, J. T. Watson, R. F. Ostrum, M. J. Prayson G. J. Della Rocca, S. Mehta, T. McKinley, Z. Wang, R. G. Steen (New Orleans, LA/US)
12:20	Deformity correction and intramedullary nailing – indications and limits
OS8-57	<u>Florian Wolf</u> , J. Fürmetz, T. Eilers, P.H. Thaller (Munich/DE)
12:30	Bone transport for bone defects – how to face the big gap
OS8-58	<u>Florian Wolf</u> , P.H. Thaller, J. Fürmetz (Munich/DE)
12:40	Predictors of non-union and infectious complications in patients with post-traumatic subtalar arthrodesis
OS8-59	<u>Siem Dingemans</u> , M. Backes, J. C. Goslings, V. de Jong, J. Luitse T. Schepers (Amsterdam/NL)
12:50	Avoiding cardiovascular complications of cement – cementless hemiarthroplasty for femur neck fractures – a fall-control study to evaluate intraoperative cardiorespiratory changes due to cement use
OS8-60	<u>Athanasios Terzis</u> , W. Friedl (Aschaffenburg/DE)
13:00	Dead space management in intramedullary infections
OS8-61	<u>Florian Wolf</u> , J. Fürmetz, S. Patzler, P.H. Thaller (Munich/DE)

## Scientific programme • Saturday, 24 September

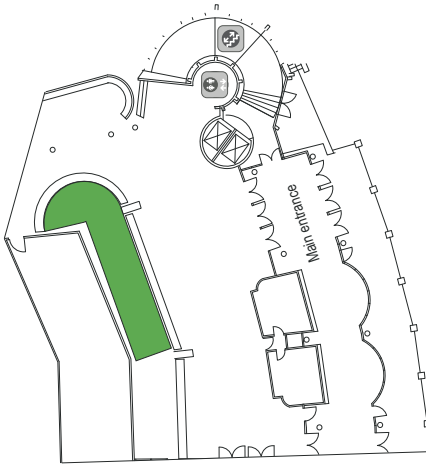
- 13:10  
OS8-62      The results of bone grafting in the management of poor regenerate formation during lengthening with lengthening nails  
Mehmet Fatih Erol (Tekirdag/TR), B. Abay (Istanbul/TR), O. Karakoyun (Tekirdag/TR)  
M. Kücükaya (Istanbul/TR)
- 13:20  
OS8-63      The importance of reaming the posterior femoral cortex before inserting lengthening nails and calculation of the amount of reaming  
Metin Kücükaya (Istanbul/TR), O. Karakoyun, M. F. Erol (Tekirdag/TR)
- 13:30  
OS8-64      The use of plastic fasteners for intramedullary nailing  
David Seligson (Louisville, KY/US)
- 13:40  
OS8-65      Buprenorphine/Naloxone for maintenance opioid therapy  
David Easley, W. Lattice (Louisville, KY/US)
- 13:50–14:20      [Closing ceremony](#)

# Floor and exhibition plan

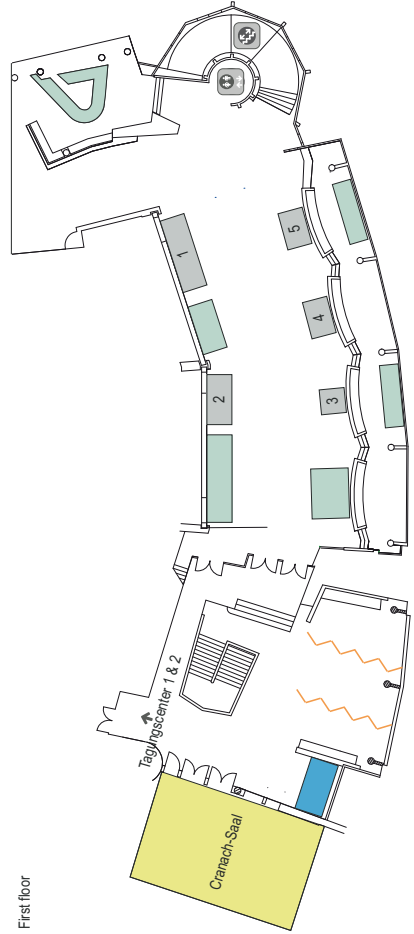
(preliminary as of July 2016)

- Legend
- Check-in/Quick check-in
  - Industrial exhibition
  - Foods & beverages
  - Plenary hall
  - Media check-in
  - Poster exhibition

Ground floor



First floor



## Corporate workshop • Exhibitors

Friday, 23 September

13:00–14:00 Corporate workshop – INTERCUS GmbH  
The Gliding Nail (GN) – an universal implant with rotation stability and minimised cut out risk

Room Tagungcenter

Speaker Ulrich Göhring, Tim Arnold (Aschaffenburg/DE)

Fee free of charge, but registration required (limited number of participants)

### Exhibitors (alphabetical)

ImplanTec Deutschland GmbH (Lüdinghausen/DE)

INTERCUS GmbH (Bad Blankenburg/DE)

Königsee Implantate GmbH (Allendorf/DE)

OPED GmbH (Valley/DE)

Smith & Nephew GmbH (Hamburg/DE)

State at printing



We would like to thank the following companies for their support:

### Platinum sponsor

INTERCUS GmbH (Bad Blankenburg/DE)



### Gold sponsor

ImplanTec Deutschland GmbH (Lüdinghausen/DE)



### Silver sponsor

Königsee Implantate GmbH (Allendorf/DE)

Smith & Nephew GmbH (Hamburg/DE)

### Bronze sponsor

OPED GmbH (Valley/DE)

### Sponsor

ImplanTec Austria GmbH (Mödling/AT)

Innomed-Europe LLC (Cham/CH)

### Media cooperations

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

Elsevier B.V. (Amsterdam/NL)

## Social and cultural programme

### Social programme

#### Welcome reception • Thursday, 22 September

The organiser welcomes all registered participants of the congress in the industrial exhibition area. Meet your colleagues and other participants by fresh drinks and snacks right after the poster session.

Time	19:30 h
Location	Industrial exhibition
Fee	included for participants

#### Gala dinner • Friday, 23 September

We invite you join the gala dinner and to enjoy a pleasant evening with a tasty dinner in the charming atmosphere of the historic Ridingsaal in the castle of Aschaffenburg.

Time	19:30 h
Location	Ridingsaal • Schloss Johannisburg, Aschaffenburg/DE
Fee	30 EUR

### Cultural programme\*

#### Discovering the south • Thursday, 22 September

Discover the “southern flair” of Aschaffenburg on this guided tour through the town:

- history of the Pompejanum
- mediterranean castle garden and its treasures
- history of the castle
- Aschaffenburg’s old town
- Theatre Square with sundial

Time	10:00–11:30 h
Meeting point	Check-in desk (ground floor)
Fee	11 EUR
minimum number of participants	10

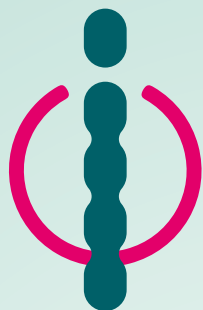
#### Moi Ascheberg – walk through the old town • Friday, 23 September

Picturesque corners of the historic old town are waiting to be discovered by you:

- getting to know the old town
- history of the castle
- stories of the Archbishops and Electors of Mainz
- the canons and the “heart” of Aschaffenburg

Time	13:00–14:00 h
Meeting point	Check-in desk (ground floor)
Fee	9 EUR
minimum number of participants	10

\* A registration is required. Please also note that the tours may be cancelled due to non-achievement of minimum number of participants.



intercus

[www.intercus.de](http://www.intercus.de)

*„Established  
with a 20 year  
clinical history“*



**GN GLIDING NAIL**  
proximal femoral nail

## General information

### Registration

Registration for the congress is required. Please register online at [www.osteosynthese2016.de](http://www.osteosynthese2016.de).

### Registration fees

Full congress	
Members**	300 EUR
Non-members	350 EUR
Members ESTES**	315 EUR
Residents*	150 EUR
Students/Physiotherapists*	100 EUR
Gala dinner	30 EUR

\* Please provide proof of status via fax +49 3641 31 16-244 or e-mail [registration@conventus.de](mailto:registration@conventus.de) and quote GKS 2016.

\*\* Please provide a proof of membership via fax +49 3641 31 16-244 or e-mail and quote GKS 2016.

### 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
- Welcome reception
- Congress materials (congress bag, final programme, name badge)

### Accommodation

The Aschaffenburg tourist office will gladly assist you in finding the appropriate accommodation during the Osteosynthese International 2016. Further information on accommodation as well as the hotel booking form is provided at [www.osteosynthese2016.de](http://www.osteosynthese2016.de).

### General terms and conditions

Please find our general terms and conditions at [www.osteosynthese2016.de](http://www.osteosynthese2016.de).

### Travel

#### By car

Easy accessibility via A3 Frankfurt/Würzburg as well as A45 from direction Dortmund/Hanau. The Stadthalle is located in the city center of Aschaffenburg and only 5 minutes from the highway exits.

#### *Address for navigation system*

Stadthalle am Schloss Aschaffenburg  
Schloßplatz 1 • 63739 Aschaffenburg/DE

#### *Parking*

The location offers parking spaces in the underground car park. Please use the underground car park "Stadthalle" (entrance gate via Treibgasse) or the adjacent underground car park "Luitpoldstraße". You can get a congress parking ticket at the check-in desk on ground floor.

The ticket entitles you to exit and enter the underground car park during the validity of the parking ticket.  
Fee 6 EUR per 24 hrs

#### By plane

Frankfurt International Airport is only 50 km from Aschaffenburg. You can reach Aschaffenburg in approx. 40 minutes by train or car.

#### Airport Pick-up service

For a stress-free travel from Frankfurt Airport to Aschaffenburg, you can order an airport pick-up service. Please contact the company below at the latest 1 day before your scheduled arrival by stating your flight number. Further information will be provided by Metropolis Taxi.

#### *Metropolis Taxi*

Werttstraße 1 • 63741 Aschaffenburg/DE  
Phone +49 6021 41 77 41

#### By train

Aschaffenburg central station is located in the city center of Aschaffenburg. Your journey from the central station to the venue will take approximately 10 minutes by foot.

## General information

For a successful arrival. Travel by train from anywhere in Germany for just 99 EUR.



Conventus has partnered up with Deutsche Bahn to create an exclusive deal that allows you to travel conveniently to the Osteosynthese International 2016 in Aschaffenburg.

Take advantage and make the journey time yours. Use your outward and return journeys to work, read or relax. Whatever you decide to do, your long-distance travel with the Event Ticket will be powered by 100% renewable energy.

Your Event Ticket for a return journey\* to and from all train stations in Germany is priced as follows:

2<sup>nd</sup> class EUR 99 (for booked train connection)

1<sup>st</sup> class Euro 159 (for defined train connection)

2<sup>nd</sup> class EUR 139 (for all trains)

1<sup>st</sup> class Euro 199 (for all trains)



We would be happy to inform you about ticket prices for international journeys on request.

Click to book your ticket quickly and easily online.\*\*\*

[www.bahn.de/veranstaltungsticket-download](http://www.bahn.de/veranstaltungsticket-download)

This special offer is valid for all events and congresses of Conventus Congressmanagement & Marketing GmbH in 2016.

To book please follow the online link above or call +49 1806 31 11 53\*\* and state "Conventus" as reference. Please have your credit card ready when booking.\*\*\* Your booking will be binding after Deutsche Bahn's confirmation.

BahnCard, BahnCard Business or bahn.bonus Card holders receive the Event Ticket bahn.bonus points. For further information: [www.bahn.de/bahn.bonus](http://www.bahn.de/bahn.bonus).

Conventus Congressmanagement & Marketing GmbH and Deutsche Bahn wish you a pleasant journey!

\* An advanced booking of at least three days is required. Changes and reimbursement before the first day of validity are possible. Changes and reimbursement conditions at the time of the ticket booking according to Conditions of Carriage of the DB of Sparpreis fares. Changes and reimbursement are excluded from the first day of validity onwards. Passengers restrict themselves to a particular train and travel times. For a supplement of Euro 40 full flexible tickets are also available for domestic travels within Germany.

\*\* The booking line is available from Monday to Saturday 07:00–10:00 h. Calls will be charged at Euro 0.20 per call, from mobiles Euro 0.60 per call at maximum.

\*\*\* Please note that Deutsche Bahn AG introduced a surcharge for all credit card payments in accordance with the conditions of carriage for persons travelling with Deutsche Bahn AG companies ("BB Personenverkehr").

City map



© Kongress- und Touristikbetriebe der Stadt Aschaffenburg

## General information

### Certification

#### ... for participants from Germany

The Osteosynthese International 2016 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 2016 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](http://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

	Thursday	Friday	Saturday
Check-in	07:30–19:30 h	07:30–18:30 h	07:30–15:00 h
Media check-in	10:30–18:30 h	07:30–18:30 h	07:30–12:00 h
Industrial exhibition	12:30–22:00 h	08:30–18:30 h	09:00–12:00 h
Poster exhibition	07:30–18:30 h	12:00–19:00 h	09:00–14:45 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.



### 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 2016 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 [osteosynthese2016@conventus.de](mailto:osteosynthese2016@conventus.de).

### Presentation upload

The media check-in for uploading your presentation is located on 1<sup>st</sup> floor.

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, 22 September from 18:30–19:30 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, 22 September by 18:00 h and be removed, at the latest, by Saturday, 24 September, 13:30 h. Posters that have not been removed by the said time will be considered as waste.

## Index of authors and chairs

<b>A</b>			<b>G</b>		
Abay, B.	13, 22	Carata, E.	17	Galler, M.	19
Akbar, M.	14	Çetinkaya, M.	19	Georgiannos, D.	10
Akdemir, M.	11, 12, 13, 20	Chorneyi, V.	11	Gerner, H. J.	14
Aksoy, C.	10	Cleffken, B.	17	Gheorghievici, T. S.	17
Aktuglu, K.	11, 17	Cornelius, N.	14	Gierer, P.	13, 20
Alias-Petralanda, A.	10	Curschmann-Horter, M.	15	Gilbert, F.	11
Altay, M.	9			Gkouvas, G.	10
Altintas, B.	15	<b>D</b>		Gogulescu, B.	20
Anglitoiu, B.	17	d'Ailly, P.	17	Göhring, U.	11, 18
Arikan, A.	12, 13, 20	Dan, C.	8	Goslings, J. C.	17, 21
Arnold, T.	10, 18	Daniel, V.	14	Gracey, S.	12
Asaftei, R.	16	de Jong, V.	21	Gradi, G.	18, 20
Assiov, S.	12	Demirkale, I.	9	Gradi, G.	18, 20
Ataoğlu, M. B.	19	Dingemans, S.	21	Greco, A.	8
Atay, T.	11	Döbele, S.	18	Greco, D.	8
Athar, M.	13	Dousa, P.	19	Gueorguiev, B.	19
Attila, B.	10	Drissner, A. L.	13	Gürses, M. S.	12
Auer, R.	8	Durak, A.	10, 12, 13, 16		
Augat, P.	11, 19	Durak, D.	12, 13	<b>H</b>	
Ayanoğlu, T.	19	Durak, K.	10, 12, 16	Haase, R.	15
Aydogan, T.	13	Durak, V. A.	12, 13	Hackl, S.	19
		Dzupa, V.	19	Haragus, H.	17
				Harnof, T.	15
<b>B</b>		<b>E</b>		Harty, J.	13
Backes, M.	21	Easley, D.	22	Hatami, G.	17
Baig, M.	12	Eden, L.	16	Heller, R.	14
Bail, H. J.	10, 15	Eilers, T.	21	Herlyn, P.	14
Baltov, A.	12; 18	Eken, G.	10	Hierholzer, C.	19
Banshiwal, R. C.	12, 16	Ekin, A.	11, 12, 13, 20	Höchtl-Lee, L.	16, 18
Bardas, A.	15	Enchev, D.	12, 18	Hoffmann, E.	12
Bardas, C.	8; 15	Erbay, A.	13, 20	Hölscher-Doht, S.	8
Bartoska, R.	19	Erdmann, J.	11	Houseman, B.	11
Başal, Ö.	11	Ermisch, C.	21	Il'nitskiy, O.	11
Baykal, Y. B.	11	Erol, M. F.	13, 22		
Bayraktar, E.	12	Eschler, A.	18	<b>I</b>	
Benea, H.	8, 15	Faerber, L.-C.	8	Isik, S.	10
Berea, G.	16				
Biber, R.	10, 15	<b>F</b>		<b>J</b>	
Biçen, A. Ç.	11, 12, 13, 20	Falk, S.	20	Jakubietz, M.	11
Biglari, B.	14	Faur, C.	17	Jakubietz, R.	11
Bisbinas, I.	10	Fehske, K.	20	Jansen, H.	8, 11, 16, 20
Blunk, T.	8	Feng, S.	13	Janzing, H.	9
Boccaccini, A. R.	13	Filipov, O.	19	Jordan, M.	11, 20
Bodescu, A.	16	Fischer, D.-C.	14	Jordan, M. C.	8
Brakelmann, A.	18	Fleckenstein, S.	15		
Brand, A.	11	Fox, R.	8	<b>K</b>	
Bühren, V.	18, 19	Frey, S. P.	8	Kalashnikov, A.	8
Buyukdogan, K.	10	Friederichs, J.	19	Kanatli, U.	19
		Friedl, W.	9, 10, 15, 16, 17, 18, 21	Kapoutsis, D.	10
<b>C</b>		Füchtmeier, B.	19	Karaca, S. G.	12
Caglar, O.	10	Fürmetz, J.	21	Karakoyun, O.	22
Calin, D.	8				

## Index of authors and chairs

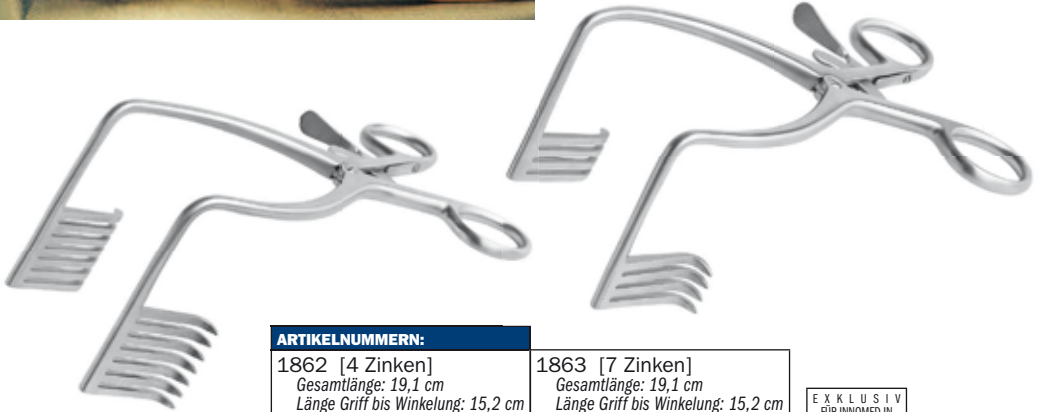
Kauczor, H.-U.	13	P			
Kayaokay, K.	11, 17	Paiusan, M.	8, 15	Täger, G.	15
Kennedy, C.	13	Patir, S.	12	Teja, A. M.	12, 16
Kirdemir, V.	11	Patzler, S.	21	Terzis, A.	16, 21
Klöpfer-Krämer, I.	11	Pätzold, R.	11	Thaller, P.H.	20, 21
Kneser, U.	13	Poenaru, D. V.	17	Tokgozoglu, M.	10
Kocaman, M.	13	Pompach, A.	18	Tomoaia, G.	8, 15
Konstantinidis, A.	10	Pozdeev, M.	20	Tomoaia, R.	8, 15
Konya, M. N.	11	Prejbeanu, R.	17	Tudor, R.	16
Kröger, I.	11	Prica, C.	8	Turan, A. C.	11, 12, 20
Küçükçaya, M.	13, 22	Prokscha, M.	13	Türken, M. A.	11, 12, 13, 20
		Protsenko, V.	11		
		Puha, B.	17		
<b>L</b>		<b>R</b>		<b>U</b>	
Lackner, J.	11	Rammelt, S.	18	Ulmar, B.	18
Lampridis, V.	10	Rares, S.	17	Ural, M. N.	12
Lattice, W.	22	Rashkov, M.	12, 18	<b>V</b>	
Lenich, A.	15	Reinhardt, S.	18	van Walsum, A.	9
Li, W.	13	Reynders-Frederix, C.	12	Varma, R.	8
Liu, J.	13	Reynders-Frederix, P.	12	Verim, O.	11
Lu, L.	13	Richter, M.	12	Vermesan, D.	17
Luitse, J.	21	Riehl, J.	8	Vilensky, V.	20
		Rinner, M.	15	Völlner, T.	13
<b>M</b>		Roerdink, W.	9	von Rüden, C.	19
MacKinlay, K.	11	Rotter, R.	13	von Stein, T.	20
Malyk, V.	8	<b>S</b>		Vroemen, J.	9
Markov, M.	12	Sarbu, M.	8	<b>W</b>	
Martin, H.	18	Sawidis, M.	10	Walenkamp, M.	17
Meffert, R. H.	8, 11, 16, 20	Schep, N.	17	Weigl, M.	15
Mielsch, N.	20	Schepers, T.	21	Weis, C.	13
Mirzazade, J.	11	Schmidmaier, G.	13, 21	Welch-Phillips, A.	13
Mittlmeier, T.	13, 14, 18, 20	Schreiber, U.	15	Wendt, M.	20
Moghaddam, A.	13, 14, 21	Seligson, D.	8, 9, 11, 12, 22	Westhauser, F.	13
Morgenstern, M.	19	Sesen, H.	9	Wichelhaus, A.	13
Mulders, M.	17	Shaban, W.	8	Winkelhorst, T.	9
Müller, F.	19	Sirbu, P.-D.	16, 17, 20	Wolf, F.	21
		Skala-Rosenbaum, J.	19	Woltmann, A.	19
<b>N</b>		Sommer, C.	19	<b>Y</b>	
Nomides, R.	10	Sova, R.	16	Yadav, M. K.	12
		Sozbilen, M. C.	11, 17	<b>Z</b>	
<b>O</b>		Stavinskyi, Y.	8	Zakharyan, E.	20
Okkaoglu, M. C.	9	Stedtfeld, H.-W.	10	Zhou, H.	13
Okkaoglu, Y.	9	Steen, R. G.	10, 13, 21	Ziegler, D.	16
Oltean, D.	8, 15	Steffen, C.	14	Zirngibl, B.	15
Oprea, M.	17	Stoffel, K.	19	Zsolt, G.	8
Ozcanyuz, B.	11	Suer, O.	17	Zura, R. D.	8, 10, 13, 21
Ozdemir, M.	9	Swing, T.	14	Zwipp, H.	18
Özer, M.	19				
Ozkayin, N.	11, 17				



## Tiefer Weichteilretractor für Trauma/Wirbelsäule

Zur Maximierung der Darstellung mithilfe  
von 90°-Armen und tiefen Weichteilhaken

Die Retraktorarme gibt es mit 7 oder 4 Zinken.



### ARTIKELNUMMERN:

1862 [4 Zinken]  
Gesamtlänge: 19,1 cm  
Länge Griff bis Winkelung: 15,2 cm  
Tiefe ab Biegung: 8,3cm  
Zinken: 38 cm x 1,9 cm

1863 [7 Zinken]  
Gesamtlänge: 19,1 cm  
Länge Griff bis Winkelung: 15,2 cm  
Tiefe ab Biegung: 8,3cm  
Zinken: 3,8 cm x 3,5 cm

EXKLUSIV  
FÜR INNOMED IN  
DEUTSCHLAND  
HERGESTELLT

## Fromm Femur- & Tibia-Dreiecksstützen

Entwickelt von S.E. Fromm, MD

Extra kleine Dreiecksstütze, entwickelt von S.E. Fromm, MD & Kenneth Merriman, MD

Zur Positionierung von Femur und Tibia für die  
Knochennagelung, für rekonstruktive Eingriffe  
und zur Frakturversorgung

### ARTIKELNUMMERN:

2760-00 [3er-Set] Winkel: oben 30°, unten 2 x 75°

2760-01 Basis: 15,2 cm, Höhe: 27,9 cm

2760-02 Basis: 17,8 cm, Höhe: 35,6 cm

2760-03 Basis: 22,9 cm, Höhe: 40,7 cm

Separat erhältlich – nicht im Set enthalten:

2760-XS Basis 12,7 cm, Höhe: 21,6 cm

HERGESTELLT  
IN DEN USA



Innomed-Europe GmbH  
Innomed-Europe LLC

c/o Emons Logistik GmbH In Rammelswiesen 9 D-78056 Villingen-Schwenningen  
Alte Steinhäuserstrasse 19 CH-6330 Cham Schweiz Tel: 0041 (41) 740 67 74

Einscannen  
um zu unserer  
Website zu  
gelangen



**INNOMED**

Tel: 0049 (0) 7720 46110 60  
Fax: 0049 (0) 7720 46110 61

www.innomed-europe.com  
info@innomed-europe.net