

**PROGRAM****5th International 3D-Surgery Course - 10 Years of 3D-Surgery****18.09. - 21.09.2019****Day-1 (17.09.2019)****Deformity Correction with Nails and Lengthening Nails****Welcome Ceremony**

08:00-8:10	Welcome and Introduction	10	P.H. Thaller, M. Küçükaya, H. Kinik
08:10-8:20	Welcome note from the director of the hosting clinic	10	W. Böcker
08:20-8:30	Welcome from the president of the künstscher society	10	G. Gradl

**Analysis, Planning and Techniques - Chair: K. Durak**

08:30-08:50	History of lengthening nails	20	P.H. Thaller
08:50-09:10	Analysis and End-Point-First-Planning (EPF) for lengthening and deformity correction with nails	20	F. Wolf
09:10-09:30	Medullary canal diameter reducing techniques in long bones	20	O. Poyanlı

**09:30-10:00 Coffee break and Visit of Industry Exhibition****Drawing lab and Video Session on Analysis and Planning**

10:00-11:30	Analysis and End-Point-First-Planning (EPF) of simultaneous lengthening and deformity correction of femur and tibia	90	P.H. Thaller, F. Wolf, N. Degen, F. Chen
11:30-12:00	Video-Session: Digital Analysis and digital EPF-Planning	30	P.H. Thaller

**12:00-13:00 Lunch and Visit of Industry Exhibition**

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**Techniques – Chair: K. Aktuğlu**

13:00-13:20	Clinical experience with five different fully implantable lengthening systems	20	P.H. Thaller
13:20-13:40	Self-lengthening nails - our experience	20	E. Segev
13:40-14:00	Monofocal deformity correction with nails – retrograde femur	20	P.H. Thaller
14:00-14:20	Suprapatellar nailing technique in correction of tibial deformities	20	S. Sökücü
14:20-14:40	Lengthening nails in pediatric cases	20	M. Küçükaya

**14:40-15:00 Coffee Break and Visit of Industry Exhibition****Bone & Model lab**

15:00-16:10	Blocking screws for deformity correction with nails “3D model-bone” lab for blocking screws	70	O. Poyanlı / Team
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**16:10-16:30 Coffee Break and Visit of Industry Exhibition****Techniques – Chair: G. Okçu**

16:30-16:50	Deformity correction far from the knee with im-nails	20	P.H. Thaller
16:50-17:10	Aspects in lengthening of the humerus with im-nails	20	N. Degen
17:10-17:30	Fine tuning of alignment and fit by on-site bending of nails	20	F. Wolf
17:30-17:50	Dead space management in osteomyelitis after nailing	20	N. Degen

**17:50-18:00 Closing of the Day - Awards for the best groups**

Faculty of the Day

**Day-2 (18.09.2019)****Deformity Correction with Plates****Basic rules – Chair: P.H. Thaller**

08:30-8:40	Radiological examination and comparison of the different radiologic techniques in 3D deformity surgery limits in management of limb deformities	10	B. Abay
08:40-09:00	How the lower extremity deformities effect the knee?	20	B. Beksaç
09:00-09:20	Analysis and EPF-Planning of osteotomies around the knee	20	F. Wolf

**09:20-09:40 Coffee Break and Visit of Industry Exhibition****Drawing lab**

09:40-11:40	Analysis and EPF-Planning of osteotomies around the knee	120	P.H. Thaller / Team
11:40-12:00	Osteotomy principles & Techniques	20	F. Wolf
12:00-12:20	Intra-operative alignment control: The x-ray grid method	20	N. Degen

**12:20-13:30 Coffee Break and Visit of Industry Exhibition****Bone & Model lab**

13:30-15:30	Locking plates for osteotomies around the knee Distal medial femur closed wedge Proximal Medial tibia open wedge	120	M. Küçükaya / H. Kinik
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**15:30-15:50 Coffee Break and Visit of Industry Exhibition****Techniques – Chair: H. Kinik**

15:50-16:10	Plating for deformity correction around the knee	20	M. Küçükaya
16:10-16:30	Plating for deformity correction far from the knee	20	P.H. Thaller
16:30-16:50	Plating for deformity correction around the ankle	20	H. Kinik
16:50-17:10	Plating for deformity correction around the hip	20	M. Araz

**17:10-17:30 Closing of the Day - Awards for the best groups**

Faculty of the Day

<b>Day-3 (20-09-2019)</b>		<b>Deformity Correction with external Fixators and Defect Reconstruction</b>	
<b>Planning – Chair: K. Durak</b>			
08:00-08:30	Mal-alignment test - Analysis & planning - CORA method , osteotomy rules (Basic rules)	30	K. Tetsworth
08:30-09:00	Fixation and deformity correction principles for circular external fixators	30	M. Gülşen
<b>Bone Lab</b>			
09:00-11:00	What is different in TSF in terms of fixation principles, K. Tetsworth hardware and software (Basic rules)	120	
<b>Deformity and fracture correction with TSF at sawbone</b>			
11:00-11:20	<b>Coffee Break and Visit of Industry Exhibition</b>		
<b>Techniques – Chair: M. Gülşen</b>			
11:20-11:40	Combined techniques for the safe correction of very large tibial	20	K. Tetsworth
<b>Rotational deformities in adults (IMN &amp; Ex Fix)</b>			
11:40-12:00	Management of shortening with combined deformities: Plates-Nails-Spider-TSF	20	M. Küçükkaya
11:40-12:00	Extra-articular Deformity: Implications for TKA	20	K. Tetsworth
12:00-13:00	<b>Lunch and Visit of Industry Exhibition</b>		
<b>Pediatrics – Chair: A. Eren, V. Aslihan Durak</b>			
13:00-13:20	Development and guided growth	20	B. Sarisözen
13:20-13:40	Updates on preoperative planning, limb deformity analysis and surgical correction for the growing children	20	E. Segev
13:40-14:00	Combined epiphyseal and metaphyseal osteotomy for Blount's disease in kids:	20	H. Kınık
<b>Technique, pearls &amp; pitfalls</b>			
14:00-14:20	Soft tissue release around the hip after femoral lengthening in pediatric cases	20	A.Eren
14:20-14:40	Congenital tibial pseudarthrosis, changes in treatment protocol	20	E. Segev
14:40-15:00	<b>Coffee Break and Visit of Industry Exhibition</b>		
<b>Techniques – Chair: A. Göğüş</b>			
15:00-15:20	Osseointegration: The Ultimate Post-traumatic Limb Reconstruction?	20	K. Tetsworth
15:20-15:30	Cosmetic approach to scars caused by limb lengthening and deformity surgery	10	S. Tunçer
15:30-15:40	Characteristic of soft tissues contractures after lengthening with lengthening nails	10	A. Apelyan
15:40-16:00	<b>Coffee Break and Visit of Industry Exhibition</b>		
<b>Panel Discussion</b>			
<b>Large Bone Defects</b>			
-- Moderator: K. Tetsworth			
16:00-16:10	Overview	10	K. Tetsworth
16:10-16:20	Why Conventional Frame (Pins/Wires)?	10	H. Kınık
16:20-16:30	Why Masquelet?	10	K. Tetsworth
16:30-16:40	Why Cable Unilateral?	10	M. Küçükkaya
16:40-16:50	Why Bone Transport Nail?	10	P.H. Thaller
16:50-17:00	Why Auto + Allograft?	10	A. Göğüş
17:00-17:10	Why Cages?	10	M.Gülşen
17:10-17:40	Panel Discussion	30	
17:40-17:50	<b>Closing of the Day - Awards for the best groups</b>		Faculty of the Day
<b>Day-4 (21-09-2019)</b>			
<b>Cadaver Lab</b>			
08:00	Transfer to the cadaver lab		
09:20-09:30	Introduction	10	
09:30-10:30	Retrograde femoral nailing with torsion control ☑ Intra-operative alignment control: The x-ray grid method	60	P.H. Thaller
10:30-11:00	Antegrad femoral nailing	30	P.H.Thaller / M. Küçükkaya
11:00-12:00	Suprapatellar nailing for tibia Fibula osteotomy Fasciotomy tib. ant. Peroneal nerve exposure	60	K. Tetsworth/ S. Sökücü
12:00-13:00	<b>Lunch</b>		
13:00-15:00	Approach to distal medial femoral osteotomy Approach to proximal medial tibial osteotomy	120	M. Küçükkaya / H. Kınık
15:00	<b>Closing Remarks</b>		P.H. Thaller, M. Küçükkaya, H. Kınık