

Program

**Instructional Course
Orthopaedic Spine Surgery**

27th Ulm Spine Week

March 10th to 15th, 2019

**Department of Orthopaedic Surgery,
University of Ulm**

In cooperation with

Department of Anatomy and Cellular
Neurobiology, University of Ulm

Department of Neurosurgery,
Military Hospital Ulm

**CME points
are requested**



RIKU.

Dear Ladies & Gentlemen,

A dramatic increase of technology in spinal surgery has been witnessed over the past two decades. New concepts such as non-fusion technology and minimal-invasive procedures have been introduced and advocated to improve clinical outcome. This, in combination with the rising number of spine surgery departments, has led to an enormous increase in the number of surgical procedures.

Generally, the application of new surgical techniques demands more skills than the use of established techniques does. However, the readiness to adopt such new technology grows much faster than the skills and the experience required. Therefore, theoretical and practical training are of prime importance.

The cooperation of the Department of Orthopaedic Surgery and the Department of Anatomy and Cellular Neurobiology of the University of Ulm with the Department of Neurosurgery of the Military Hospital Ulm enables a unique integration of theoretical and practical training in the setting of an instructional course. A panel of renowned experts in the field of spine surgery will present both classical issues and promising trends in their lectures. Hands-on workshops with sawbones and human cadavers will allow for an integration of the acquired knowledge into practical skills.

Three days of the course cover a variety of anterior and posterior techniques required for the treatment of degenerative, rheumatic, traumatic, tumorous, and deformity-related disorders of the cervical, thoracic, and lumbar spine. An entire day is dedicated exclusively to novel therapeutical approaches to lumbar disc pathology, to minimally invasive spinal procedures and to lumbar non-fusion technologies, since we believe that these issues deserve specific clarification. The last day of the course addresses issues such as the role of bone substitutes in spinal fusion, failed spine surgery and complications, the management of the osteoporotic spine, and specific requirements in treating patients with spinal cord injury.

In order to share your experience, we will have every day best/worst cases presentations. Therefore, all participants are asked to bring hard copies or electronically stored files of their best and/or worst cases. We are looking forward to interesting cases and lively discussions.

We look forward to welcome you to the 27th Ulm Spine Week.



Heiko Reichel, M.D.

Professor and Chairman

Department of
Orthopaedic Surgery

University of Ulm



Rene Schmidt, M.D.

Professor and Head

Department of
Orthopaedic and
Trauma Surgery

Alb Fils Hospital
Göppingen



Balkan Cakir, M.D.

Professor and Head

Department of
Orthopaedic Surgery

Wertach Hospital
Bobingen



Sebastian Weckbach, M.D.

Associate Professor

Department of
Orthopaedic Surgery

University of Ulm

Program overview

Program overview

	Sunday March 10 th , 2019	Monday March 11 th , 2019	Tuesday March 12 th , 2019
Location: RKU			
08.00 a.m. – 08.30 a.m.		Course opening	Review of the surgeries
08.30 a.m. – 10.00 a.m.		Lectures	Lectures
10.00 a.m. – 10.45 a.m.		Break	Break
10.45 a.m. – 12.30 p.m.		Lectures	Lectures
12.30 p.m. – 01.30 p.m.		Lunch	Lunch
Location: Anatomy			
01.30 p.m. – 02.15 p.m.		Hands-on sawbones	Hands-on sawbones
02.15 p.m. – 03.00 p.m.		Lectures Anatomy Introduction of the surgical cases	Lectures Anatomy Introduction of the surgical cases
03.00 p.m. – 05.30 p.m.		Hands-on Anatomy	Hands-on Anatomy
07.00 p.m.	Welcome reception "Zunfthaus"		ulrich evening „ulrich medical“

	Explanation of the program overview
Welcome reception	March 10 th , 2019 at 07.00 p.m.: Welcome reception with buffet and information on the course at the "Zunfthaus der Schiffeleute" (Fischer Gasse 31, 89073 Ulm) – in the old town of Ulm
Course opening	March 11 th , 2019 at 8.00 a.m.: Lecture hall/RKU
08.00 a.m. – 08.30 a.m.	Review of the surgeries of the day before
08.30 a.m. – 12.30 a.m.	Oral presentations with a 45 minutes break from 10.00 to 10.45 a.m.
12.30 p.m. – 01.30 p.m.	Lunch in the hospital cafeteria
01.30 p.m. – 02.15 p.m.	Hands-on workshop with sawbones using different implant systems in the Department of Anatomy and Cellular Neurobiology (in walking distance from RKU – the way is marked with signs)
02.15 p.m. – 03.00 p.m.	Anatomy curriculum – Introduction and discussion of the patients to be operated on the next day and optional: Discussion of your best/worst cases (presentation with USB-stick or with X-ray films)
03.00 p.m. – 05.30 p.m.	Hands-on workshop with human cadavers: Approaches and instrumentation at the cervical, thoracic and lumbar spine using image intensifiers
ulrich evening	March 12 th , 2019 at 07.00 p.m. (ulrich medical®, Buchbrunnenweg 12, 89081 Ulm): Buffet, guided company tour and experience exchange
Get together	March 13 th , 2019 at 07.00 p.m.: Guided tour of "Ulmer Münster" (Ulm cathedral) with organ recital, followed by dinner at restaurant "Bella Vista" (Münsterplatz 35, 89073 Ulm)

Program overview

Wednesday

March 13th,
2019

Review of the surgeries

Lectures

Break

Lectures

Lunch

Hands-on sawbones

Lectures Anatomy

Introduction of the surgical cases

Hands-on Anatomy

Get together
"Münsterplatz"

Thursday

March 14th,
2019

Review of the surgeries

Lectures

Break

Lectures

Lunch

Hands-on sawbones

Lectures Anatomy

Introduction of the surgical cases

Hands-on Anatomy

Friday

March 15th,
2019

Review of the surgeries

Lectures

Break

Lectures

Course closing



Monday, March 11th, 2019

Opening	Instructional course Orthopaedic Spine Surgery 27th Ulm Spine Week	H. Reichel
Introduction	Program and aims (10 min.)	B. Cakir R. Schmidt S. Weckbach
Topic	Cervical spine	
Moderation		R. Schmidt
Lectures	Cervical arthroplasty – Indications, technique, and results (20 min.)	B. Meyer
	Diagnostic and therapeutic algorithm for cervical spine injuries (20 min.)	Y.-P. Charles
	Approaches to the cervicothoracic junction and technique of laminar screws (20 min.)	N. Wright
	Principles of cervical spine deformity correction (20 min.)	H. Koller
	Treatment principles in rheumatoid arthritis of the cervical spine (20 min.)	M. Richter
	Minimally invasive surgery in the cervical spine: Applications and limitations (20 min.)	J. Duff
	Biomechanical rationale and clinical applications for posterior cervical spine stabilization (20 min.)	M. Richter
	Cervical spondylotic myelopathy – Differential diagnoses and treatment algorithm (20 min.)	C.R. Wirtz
Lunch		
Hands-on sawbones	Anterior and posterior instrumentation of the cervical spine (45 min.)	Instructors
Lectures Anatomy	Anatomy of the cervical spine (10 min.)	U. Fassnacht T. Böckers
	Transarticular screws C1/2, lateral mass screws, cervical pedicle screws and occipito-cervical instrumentation (10 min.)	M. Richter
	Introduction and discussion of the surgical cases (30 min.)	
Hands-on Anatomy	Posterior approach to the cervical spine, C1/2-Fixation (Magerl-/Harms technique), lateral mass screws, cervical pedicle screws, occipito-cervical instrumentation	Instructors

Tuesday, March 12th, 2019

Topic Thoracic spine

Moderation		C. Schulz
Lectures	Computer navigation in spine surgery – Current role and limitations (20 min.)	F. Gebhard
	Thoracic spine injuries – Open or endoscopic? (20 min.)	M. Arand
	Treatment strategies for thoracic and lumbar spine pathology by in-situ distractable cages (20 min.)	C. Neumann
	Syringomyelia – causes and treatment (20 min.)	U. Mauer
	Thoracic disc herniation – how to deal with	F. Ringel
	Current surgical concepts for adolescent idiopathic scoliosis (20 min.)	T. Schulte
	Kyphosis correction in Scheuermann's disease and ankylosing spondylitis (20 min.)	B. Wiedenhöfer
	Surgical strategies including osteotomies for degenerative scoliosis (20 min.)	T. Niemeyer
Lunch		
Hands-on sawbones	Posterior instrumentation of the thoracic and lumbar spine (45 min.)	Instructors
Lectures Anatomy	Anatomy of the thoracic spine (10 min.)	U. Fassnacht T. Böckers
	Thoracic pedicle screws, costotransversectomy (10 min.)	J. Wölfle-Roos
	Introduction and discussion of the surgical cases (30 min.)	
Hands-on Anatomy	Posterior approach to the thoracic spine, thoracic pedicle screws, costotransversectomy, decompression techniques	Instructors

Wednesday, March 13th, 2019

Topic Lumbar spine

Moderation U. Mauer

Lectures

Fractures of the thoracolumbar and lumbar spine – when to operate and when not? (20 min.)	O. Gonschorek
ALIF, PLIF, and TLIF – when to indicate and how to perform (20 min.)	A. Korge
Spinal canal stenosis – is there a need for stabilization when performing decompression? (20 min.)	W. Käfer
Selective decompression techniques for lumbar spinal canal stenosis (20 min.)	C. Schulz
The osteoporotic spine – classification and surgical treatment (20 min.)	M. Perl
Lumbosacral fixation techniques – when and how? (20 min.)	R. Schmidt
General management of spinal metastasis and management of primary vertebral tumors and solitary spinal metastatic disease (20 min.)	A. Disch
Management of iatrogenic dural tears (20 min.)	G. Freude

Lunch

Hands-on sawbones TLIF / PLIF, lumbosacral fixation and sacroiliac fusion (45 min.) Instructors

Lectures Anatomy

Anatomy of the lumbar spine (5 min.)	U. Fassnacht T. Böckers
Pedicle screws and lumbo-sacral fixation (5 min.)	C. Melcher
Introduction and discussion of the surgical cases (30 min.)	

Hands-on Anatomy Posterior approach to the lumbar spine
Lumbar/sacral pedicle screws
Lumbo-sacral/iliacal fixation
Decompression techniques
PLIF / TLIF procedures
Instructors

Thursday, March 14th, 2019

Topic Non-fusion technology and innovation

Moderation		B. Cakir
Lectures	Microscopic or endoscopic lumbar discectomy: What is the future? (20 min.)	F. Hassel
	Herniation of the lumbar intervertebral disc: What are reliable criteria for surgery? (20 min.)	B. Cakir
	Segment saving in spinal fixation (20 min.)	P. Kluger
	Biomechanical characteristics of different non-fusion implants (20 min.)	H.J. Wilke
	The concept of lumbar total disc replacement (20 min.)	C. Siepe
	Intradural spinal tumors – radiological appearance and surgical strategy (20 min.)	U. Kunz
	Sacral fractures and how to treat them	R. Schmidt
	Spinal injections - between evidence and nonsense	T. Kocak

Lunch

Hands-on sawbones	VBR anterior/posterior instrumentation (45 min.)	Instructors
Lectures Anatomy	Anterior anatomy of the spine (10 min.)	U. Fassnacht T. Böckers
	Anterior approaches to the spine (10 min.)	J. Wölfle-Roos
	Introduction and discussion of the surgical cases (30 min.)	
Hands-on Anatomy	Anterior approaches to the cervical, thoracic and lumbar spine ALIF procedures Corpectomy Vertebral body replacement	Instructors

Friday, March 15th, 2019

Topic	Varia	
Moderation		S. Weckbach
Lectures	Surgical techniques in spondylolisthesis (20 min.)	S. Weckbach
	Complications in spine surgery and their management (20 min.)	F. Lattig
	The significance of the sagittal profile (20 min.)	M. Dreimann
	Spondylitis and spondylodiscitis – how to diagnose and to manage (20 min.)	P. Eysel
	Cement augmentation of pedicle screws in the osteoporotic spine (20 min.)	M. Arab Motlagh
	The role of bone substitutes in spinal fusion (20 min.)	M. Akbar
	Charcot Spine (20 min.)	J.G. DeVine
	Spinal cord injuries – diagnostics, complications and targets (15 min.)	A. Badke
	Special rehabilitation in patients with spinal cord injury (20 min.)	C. Ribeill
Closing	Final discussion with the participants	

Scientific committee
Organization committee
Instructors

B. Cakir, U. Mauer, R. Schmidt, S. Weckbach, H. Reichel
 B. Cakir, T. Kocak, U. Mauer, R. Schmidt, C. Schulz, S. Weckbach
 B. Cakir, G. Freude, T. Kocak, P. Kluger, U. Kunz, F. Lattig, R. Mathieu,
 U. Mauer, C. Melcher, R. Schmidt, C. Schulz, S. Weckbach, J. Wöfle-Roos

Faculty

M. Akbar	Dept. of Orthopaedic and Trauma Surgery, University of Heidelberg, Germany
M. Arab Motlagh	Dept. of Spine Surgery, Sana Hospital Offenbach, Germany
M. Arand	Dept. of Trauma Surgery, Hospital Ludwigsburg, Germany
A. Badke	Dept. of Spine Surgery, BG Hospital, Tübingen, Germany
T. Böckers	Dept. of Anatomy and Cellular Neurobiology, University of Ulm, Germany
B. Cakir	Dept. of Orthopaedic Surgery, Wertach-Hospital Bobingen, Germany
Y.-P. Charles	Dept. of Spine Surgery, Hopital Civil Strasbourg, France
J.G. DeVine	Dept. of Spine Surgery, Augusta University, Augusta, USA
A. Disch	Dept. of Orthopaedic and Trauma Surgery, University of Dresden, Germany
M. Dreimann	Dept. of Spine Surgery, UKE, University of Hamburg, Germany
J. Duff	Dept. of Clinical Neurosciences, Lausanne, Switzerland
P. Eysel	Dept. of Orthopaedic and Trauma Surgery, University of Cologne, Germany
U. Fassnacht	Dept. of Anatomy and Cellular Neurobiology, University of Ulm, Germany
G. Freude	Dept. of Neurosurgery, Military Hospital Ulm, Germany
F. Gebhard	Dept. of Trauma Surgery, University of Ulm, Germany
O. Gonschorek	Dept. of Spine Surgery, BG Hospital Murnau, Germany
F. Hassel	Center for Spine Surgery, RKK Clinic Freiburg, Germany
W. Käfer	Dept. of Spine Surgery, Westpfalz Hospital, Kusel, Germany
P. Kluger	Spine Surgeon, Erbach, Germany
T. Kocak	Dept. of Orthopaedic Surgery, University of Ulm, Germany
H. Koller	Dept. of Orthopaedic Surgery, Schön Hospital Fürth, Germany
A. Korge	Center for Spinal Surgery, Orthopaedic Hospital München-Harlaching, Germany
U. Kunz	Dept. of Neurosurgery, Military Hospital Ulm, Germany
F. Lattig	Dept. of Spinal Surgery, Berit Hospital, Speicher, Switzerland
R. Mathieu	Dept. of Neurosurgery, Military Hospital Ulm, Germany
U. Mauer	Dept. of Neurosurgery, Military Hospital Ulm, Germany
C. Melcher	Dept. of Orthopaedic Surgery, University of Ulm, Germany
B. Meyer	Dept. of Neurosurgery, Technical University Munich, Germany
C. Neumann	Dept. of Trauma Surgery, University of Regensburg, Germany
T. Niemeyer	Dept. of Spine Surgery, Asklepios Paulinen Hospital Wiesbaden, Germany
M. Perl	Dept. of Spine Surgery, BG Hospital Murnau, Germany
H. Reichel	Dept. of Orthopaedic Surgery, University of Ulm, Germany
C. Ribeill	Dept. of Orthopaedic Surgery, University of Ulm, Germany
M. Richter	Dept. of Spine Surgery, St. Joseph Hospital Wiesbaden, Germany
F. Ringel	Dept. of Neurosurgery, University of Mainz, Germany
C. Siepe	Center for Spinal Surgery, Orthopaedic Hospital München-Harlaching, Germany
R. Schmidt	Dept. of Orthopaedic and Trauma Surgery, Alb Fils Hospital, Göppingen, Germany
T.L. Schulte	Dept. of Orthopaedic Surgery, University of Bochum, Germany
C. Schulz	Dept. of Neurosurgery, Military Hospital Ulm, Germany
S. Weckbach	Dept. of Orthopaedic Surgery, University of Ulm, Germany
B. Wiedenhöfer	Dept. of Spine Surgery, ATOS Hospital Heidelberg, Germany
H.J. Wilke	Dept. of Orthopaedic Research and Biomechanics, University of Ulm, Germany
C.R. Wirtz	Dept. of Neurosurgery, University of Ulm, Germany
J. Wöfle-Roos	Dept. of Orthopaedic Surgery, University of Ulm, Germany
N. Wright	Neurosurgical Cervical Spine Institute and Spine Center, St. Louis, USA

Course locations

Department of Orthopaedic Surgery
Universitäts- und Rehabilitationskliniken Ulm (RKU)
University of Ulm
Oberer Eselsberg 45, 89081 Ulm, Germany

Department of Anatomy and Cellular Neurobiology
University of Ulm
Albert-Einstein Allee 11, Block N 26 (ground floor)
89081 Ulm, Germany

Organization/ Course Secretary

Mrs. C. Schmidt
Department of Orthopaedic Surgery, RKU
University of Ulm
Oberer Eselsberg 45, 89081 Ulm, Germany
Phone: +49 731 177-1101, Fax: +49 731 177-1103
E-mail: claudia.schmidt@rku.de

Hotel information

Hotel Lago (booking no.: 498924, deadline: February 10th, 2019)
Friedrichsau 50, 89073 Ulm, Germany
Phone: +49 (0) 731 206 400 100
Fax: +49 (0) 731 206 400 121
E-mail: hotel@lago-ulm.de

Hotel Maritim (booking no.: ULM 24713, deadline: January 25th, 2019)
Basteistraße 40, 890723 Ulm, Germany
Phone: +49 (0) 731 923 17901
Fax: +49 (0) 731 923 1000
E-mail: reservierung.ulm@maritim.de

Special room rates have been arranged
under "27th Ulm Spine Week".
Please book according to deadlines.
Cost must be paid directly to the hotel.

Tourist information

Stadthaus
Münsterplatz 50, 89075 Ulm, Germany
Phone: +49 731 161-2830
Fax: +49 731 161-1641
E-mail: info@tourismus.ulm.de

Course fee

900,00 € VAT included

The course fee includes

- Participation in the complete course program
- Welcome reception on Sunday, March 10th, 2019
- Lunch in the hospital cafeteria
- Coffee, soft drinks and snacks during breaks
- ulrich evening on Tuesday, March 12th, 2019
- Get together on Wednesday, March 13th, 2019
- Provision of X-ray gowns

**In case of cancellation of the course later than February 15th, 2019,
the course fee cannot be refunded.**

X-ray gown

Available on site

CME Credit

Continuing Medical Education (CME) credits are requested

Enrollment

Please complete the prepared enrollment form and send it back to the course secretary. Please include a check with the enrollment form or pay the enrollment fee by wire transfer. If there is no more capacity for your enrollment, you will receive a refund of the enrollment fee as soon as possible.

Bank account

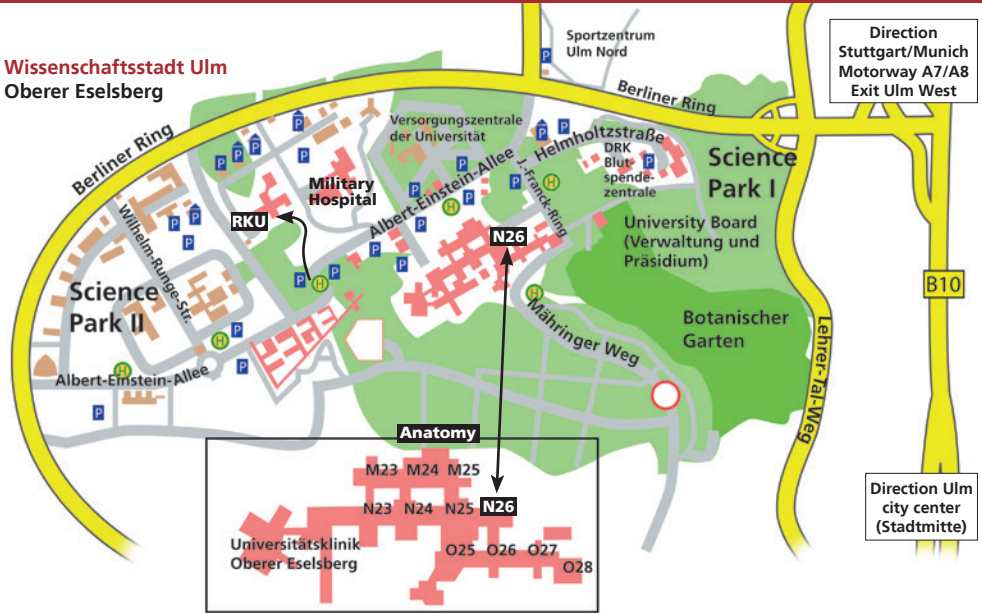
Account holder:	Universitätsklinikum Ulm
Bank:	Sparkasse Ulm
Reason for payment:	D.2815 course fee Ulm Spine Week 2019
BIC (Swift Code):	SOLADES1ULM
IBAN:	DE16 6305 0000 0000 1064 78



Directions

Directions

Wissenschaftsstadt Ulm Oberer Eselsberg



Directions to the RKU (27th Ulm Spine Week)

By car Autobahn (motorway) A8, exit "Ulm-West" (direction Ulm/Friedrichshafen). Follow direction „Stadtmitte" (city center). Turn off before city center at the exit "Universitätskliniken Eselsberg" (university hospital). At the traffic light after about 1 km go straight. Turn into the next street on the left, direction "Bundeswehrkrankenhaus" (military hospital) and "Kliniken RKU". Turn right at the next street.

By train and tram Exit train at "Hauptbahnhof Ulm" (Central train station Ulm). Take tram #2, direction "Science Park II", which departs right in front of the train station (driving time 10 minutes). Get off at the stop "Universität West". Follow the signs to "Bundeswehrkrankenhaus" and "Kliniken RKU" (about 5 minutes by foot).

Shuttle-Service/Transfer

Monday/Tuesday/Wednesday/Thursday/Friday
07.15 a.m. Hotel Lago – 07.30 a.m. Hotel Maritim – RKU

Monday/Tuesday/Wednesday/Thursday
05.45 p.m. Anatomy, Building N26 – Hotel Maritim – Hotel Lago

Tuesday, March 12th
06.30 p.m. Hotel Lago – 07:45 p.m. Hotel Maritim – ulrich medical®
10.00 p.m. ulrich medical® – Hotel Maritim – Hotel Lago

Friday, March 15th
01.30 p.m. RKU tram stop – train station and Hotel Lago

Tram stops are in walking distance to RKU

Taxi information Phone: +49 731 66 0 66

Sponsored by

Dr. Langer Medical GmbH, Waldkirch

FEHLING INSTRUMENTS GmbH & Co. KG, Karlstein

Häussler Orthopädietechnik GmbH, Ulm

Johnson&Johnson Medical GbmH, Geschäftsbereich DePuy Synthes, Umkirch

TRILUX Medical GmbH & Co. KG, Arnshausen

Ulrich GmbH & Co. KG, Ulm

State of the time of printing – Subject to change



