

Organisation

Topics

There will be 8 lectures and 2 laboratories with 8 practical exercises.

Number of participants

Min 12, max 20.

Costs

The course fee amounts to 600 Euro including workshop script, lunches and one dinner.

Workshop language

English

Confirmation of participation

Each participant will receive a certificate of participation at the end of the course.

Course Chairman

Prof. Dr. Lutz Dürselen
Institute of Orthopaedic Research
and Biomechanics
University of Ulm

Lecturers

Dr. Björn Drews (Pfronten)
Prof. Dr. Lutz Dürselen (Ulm)
Prof. Dr. Herrmann Mayr (München)
PD Dr. Sven Nebelung (Aachen)
Jonas Schwer (Ulm)
Dr. Andreas Seitz (Ulm)
Dr. Svenja Stein (Ulm)
Dr. Daniela Warnecke (Ulm)

Organising committee

Brigitte Siegel (Ulm)
Angelika Reindl (Ulm)
Werner Ohmayer (Ulm)



Venue

Institute of Orthopaedic Research and Biomechanics
Centre for Trauma Research
Ulm University - Medical Centre
Helmholtzstraße 14
D-89081 Ulm, Germany

Contact

Brigitte Siegel and Angelika Reindl
+49 731 500 55301 | med.biomechanik@uni-ulm.de

Registration

Please register through the registration form on our homepage. Bookings are accepted on a first-come first-serve basis, so please register soon.

Accommodation

A list of hotels in Ulm is linked on our homepage.

Homepage

<http://www.uni-ulm.de/index.php?id=82620>



Scan the QR code:

Instructive Workshop Basic Biomechanics and Experimental Methods for Joint Research November 27-29, 2019 Ulm, Germany

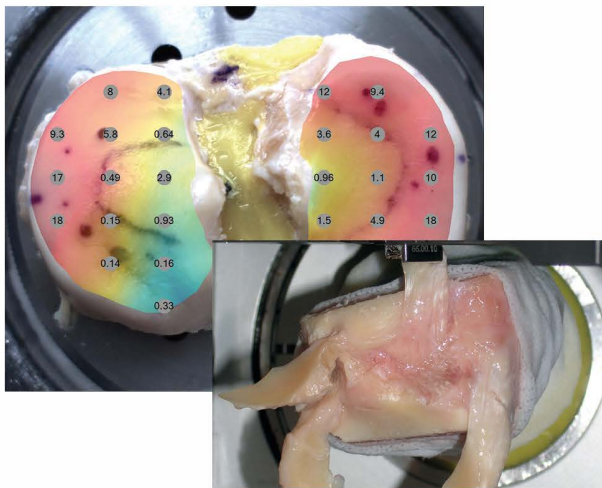


Invitation

The aim of this course is to train clinicians in basic principles of joint biomechanics. It will allow the participants to gain knowledge in planning and conducting biomechanical experiments by a balanced mixture of 8 lectures and 8 laboratories. The number of participants is limited to 20 in order to guarantee a maximum efficiency for the single participant.

We will be very happy to welcome you in our beautiful town of Ulm: Take the opportunity to get around, there is plenty to do and see. Experiencing cultural events, exploring history, or sightseeing in Ulm's Old Town and Fishermen's Quarter. Don't miss to visit the Ulm Minster and the beautiful Christmas market.

Prof. Dr. Lutz Dürselen
Course Chairman



Program

Wednesday, Nov 27

Arrival (3 pm) Welcome and introduction

Lecture I Biomechanics and clinics

Lecture II Basic biomechanics of joints

Lecture III Joint kinematics

Evening Dinner downtown

Thursday, Nov 28

Lecture IV Mechanical Properties of joint tissues:
Elasticity, viscoelasticity, properties of bone, cartilage, ligaments, meniscus

Lecture V Measuring techniques in biomechanics:
How to measure force, displacement, pressure, strain, calibration methods

Lecture VI Computer Aided Engineering

Laboratory I 1. Mechanical mapping of joint surfaces
2. Interface movement in THR
3. Tensile test of soft tissues
4. Viscoelasticity of soft tissues

Evening Sight seeing walk in the historic city of Ulm and visit of Christmas market

Friday, Nov 29

Lecture VII Biomechanics meets imaging – Innovative diagnostics of joint tissues

Lecture VIII Animal models for joint research

Laboratory II 1. How to measure friction
2. Strength of suture techniques
3. Pressure distribution
4. Motion analysis

Afternoon Summary, clinical applications, discussion and farewell (departure around 2:45 pm)

