Tuesday May 23, 2023

10:00 – 10:10	**Opening / Welcome by Peter Augat**
10:10 – 11:10	**Session 1: Tendons and menisci Chair: Werner Schmölz**
10:10	Magdalena Fuchs (TU Wien) *Tensile mechanical properties of single collagen fibrils from energy-storing tendons of a mouse model of osteogenesis imperfecta*
10:20	Herbert Tempfer (PMU Salzburg) *Buffer immersion alters mouse tendons biomechanics*
10:30	Ekaterina Oleinik (TU Wien) *The effect of scaffold stiffness on cellular alignment in tendon tissue engineering*
10:40	Andreas Reisinger (KL Krems) *Viscoelasticity of menisci measured by relaxation*
10:50	Manuel Rufin (TU Wien) *The Heterogeneity of Enzymatic Collagen Breakdown: A closer look at individual tendonous fibrils*
11:00	Aleksandra Lebedeva (TU Wien) *Combined AFM micro-identation and MALDI-TOF analysis in menisci tissue imaging*
11:10 – 11:30	**Coffee break**
11:30 – 12:10	**Session 2: Implants and biomechanics Chair: Dieter Pahr**
11:30	Wolfgang Krach (CAE Simulation & Solutions) *Verification of thorax FEM model simulations by cadaver testing*
11:40	Mischa Mühling (BGU Murnau) *A protocol to evaluate and validate implant internal forces and moments*
11:50	Werner Schmölz (Medical University of Innsbruck) *Does an additional anterolateral tenodesis proetct the anterior cruciate ligament after reconstruction?*
12:00	Dirk Baumeister (BGU Murnau) *Development of a physiologically relevant biomechanical test setup considering internal muscle forces for the investigation of complex pelvic ring fractures*
12:10 – 13:20	**Lunch break / General Assembly ESB Austrian Chapter**
13:20 – 14:10	**Session 3: Biomechanics of tissues and imaging Chair: Philipp Thurner**
13:20	Dimosthenis Giannopoulos (TU Wien) *Large-strain behavior of cell spheroids under axial compression*
13:30	You-Rong Chiang (TU Wien) *Development of a hypoelastic model for individual collagen fibrils informed by experiments*
13:40	Emir Benca (Medical University of Vienna) *Biomechanical determination of fracture loads of the odontoid process*
13:50	Alexander Synek (TU Wien) *Bone adaptation at the distal radius after volar plate removal: a pilot study using HR-pQCT scans*
14:00	Gerald Degenhart (Medical University of Innsbruck) *Machine learning improves bone quality assessment in HR-pQCT examinations*
14:10 – 14:40	**Coffee break**
14:40 – 15:30	**Session 4: Miscellaneous Chair: Peter Augat**
14:40	Ursula Windberger (Medizinische Universität Wien) *Presentation of the Austrian Society for Rheology*
14:50	Harald Penasso (Ludwig Boltzmann Institute for Traumatology) *Safety and efficacy of vibrotactile feedback for adults with trans-tibial amputation: a randomized controlled cross-over-trial*
15:00	Hans Kainz (University of Vienna) *Musculoskeletal modeling informed muscle coordination re-training to reduce knee joint loads*
15:10	Christian Hellmich (TU Wien IWMS) *Complex Biomechanics: from atoms to patients*
15:20	Lukas Pircher (TU Wien IWMS) *3D analytical beam theory for magnesium pin-implanted rat-femur*
15:45 – 16:00	**Award ceremony / farewell**

CONTACT AND DIRECTIONS

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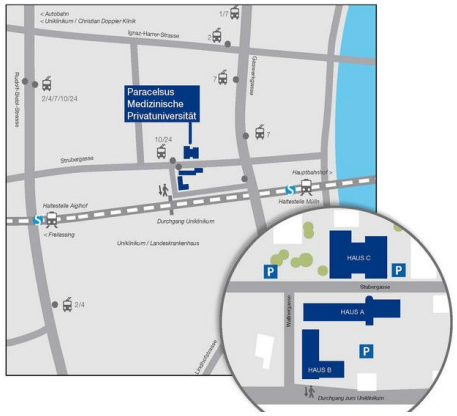
Bus 7 - Stop at: "Strubergasse"
Bus 24 - Stop at: "Stadtwerk Lehen"
Bus 2 - Stop at: "Gaswerkgasse"
Bus 27 - Stop at: "Landeskrankenhaus (Lindhofstraße)"
S-Bahn-Lines S2 and S3 – Stop at: "Salzburg-Mülln-Altstadt"



PARACELSUS MEDICAL UNIVERSITY

Program

Network meeting of the
ESB Austrian Chapter

Tuesday May 23, 2023 | 10:00 a.m.
Jörg Rehn Auditorium, Building C

Organizer:
Institute for Biomechanics
Paracelsus Medical University Salzburg
Univ.-Prof. Dr. Peter Augat

European Society of Biomechanics

BGU Murnau
Berufsgenossenschaftliche Unfallklinik Murnau