

2<sup>nd</sup> INTERREG - 7<sup>th</sup> TERMIS  
**Winterschool 2019**  
“Musculoskeletal Tissue Regeneration:  
From Mechanobiology to in Vitro/in Vivo  
Models and Advanced Imaging”



Ara Hacobian

**Radstadt – Austria**  
**January 13<sup>th</sup>-16<sup>th</sup>, 2019**

With support from the Society of the Advancement of Research in Shock and Tissue Regeneration

# Preliminary Program

Sunday, January 13<sup>th</sup>

16:00-18:05 / 18:35-19:45

## Welcome

16:00: Heinz Redl

## Cell sources

16:15-16:45: "Cells from Human Derived Waste/Donor Materials"  
*Susanne Wolbank*

16:55-17:25: "Adipose Derived Cells – Enzymatic and Non-Enzymatic Isolation"  
*Eleni Priglinger*

## Angiogenesis

17:35-18:05: "Angiogenesis and Organotypic Vasculature"  
*Wolfgang Holthoner*

🎉 BREAK 🎉  
18:05-18:35

## Open Innovation in Science

18:35-19:05: "Open Innovation in Science"  
*Veronika Hruschka*

19:15-19:45: **Poster Session + Welcome Drink**

Monday, January 14<sup>th</sup>

08:30-11:40 / 16:30-19:00

## In Vitro Systems

**08:30-09:00:** “3D Bioprinting“  
*Aleksandr Ovsianikov*

## Tendon & Ligament

**09:10-09:40:** “Tendon Degeneration and Repair – Lessons from Tendon Development and Ageing“  
*Andreas Traweger*

**09:50-10:20:** “Silk as a Versatile Biomaterial for Muskuloskeletal Tissue Engineering“  
*Andreas Teuschl*

## Neuro

**10:30-11:00:** “Regeneration of the Nervous System – Mechanisms and Models“  
*David Hercher*

**11:10-11:40:** “Acute Application of Extracellular Vesicles to Limit Secondary Damages after SCI“  
*Sébastien Couillard-Després*

🎀 **BREAK** 🎀  
**11:40-16:30**

## Mechanobiology

**16:30-17:00:** “Pre-clinical Testing and Characterization of Shockwave Therapy“  
*Paul Slezak*

**17:10-17:40:** “Biophysical Therapies in Regenerative Medicine and their Impact on Vascularization“  
*Peter Dungal*

**17:50-18:20:** “G-Protein coupled Receptors in Mechanobiology“  
*Severin Mühleder*

**18:30-19:00: Poster Session**

Tuesday, January 15<sup>th</sup>

08:30-11:40 / 16:30 – 17:40

## Muscle

**08:30-09:00:** “Hippo Pathway in Heart Development and Disease”

*Giancarlo Forte*

**09:10-09:40:** “Role of Muscle Satellite Cells in Health and Disease”

*Pete Zammit Group (to be determined)*

**09:50-10:20:** “A Focus on Satellite Cell Function in Human Skeletal Muscles”

*Pete Zammit Group (to be determined)*

## Cartilage

**10:30-11:00:** “Cartilage and Tendon Engineering: Large Animal Models”

*Iris Ribitsch*

**11:10-11:40:** “Cartilage and Tendon Engineering: From Bench to Bedside”

*Sylvia Nürnberger*

🌀 BREAK 🌀

11:40-16:30

## Bone

**16:30-17:00:** “The Clinical Impact of Delayed Bone Healing and Non-Union in Long Bone Fractures”

*Albert Kröpfl*

**17:10-17:40:** “Cell-based vs. Cell-free Approaches for Bone Regeneration”

*Darja Marolt*

🌀 SOCIAL EVENT 🌀

18:00

**Wednesday, January 16<sup>th</sup>**

**08:30-11:40**

## Imaging

**08:30-09:00:** “From nice Pictures to solid Data”  
*Pavol Szomolanyi*

**09:10-09:40:** “Hard Tissue Histology – Methods and Quantitative Evaluation”  
*Stefan Tangl*

**09:50-10:20:** “Micro-CT Imaging of Materials and Tissues in Preclinical Models”  
*Patrick Heimel*

**10:30-11:00:** “Assessment of Bone Scaffold Deformation Behaviour using 4D Microtomography”  
*Dan Kytyr / Petr Zlamal*

**11:10-11:40:** “Saving the Biomedical Sample: Extraction of Information from Brightfield and Widefield Micrographs”  
*Dalibor Stys*

🎀 **Closing Remarks** 🎀

## Registration

**Early bird registration until December 7th**  
**Registration Deadline: December 20th**

### **Contact Address:**

Mag. Bettina Standhartinger  
Ludwig Boltzmann Institute for Experimental and Clinical Traumatology  
Austrian Cluster for Tissue Regeneration  
Donauerschlingenstrasse 13, A-1200 Vienna – Austria

**Email: [office@trauma.lbg.ac.at](mailto:office@trauma.lbg.ac.at)**

Tel.: +43-5-9393-41961

<http://trauma.lbg.ac.at/>