

First INTERREG - 6<sup>th</sup> TERMIS

# Winterschool 2018

"Mechanobiology in Musculoskeletal Tissue  
Regeneration - In Vitro/In Vivo Preclinical  
Models and Imaging"

Radstadt – Austria  
January 14<sup>th</sup> -17<sup>th</sup>, 2018

Society of the Advancement of Research in Shock and Tissue Regeneration

# Preliminary Program

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

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

## Welcome

16:00: Heinz Redl

## Cell sources

16:15-16:45: "Adipose Derived Cells – Enzymatic and Non-Enzymatic Isolation"  
*Eleni Priglinger*

16:55-17:25: "Cells from Human Derived Waste Materials"  
*Susanne Wolbank*

17:35-18:05: "G protein-coupled receptors in Mechanobiology"  
*Severin Mühleder*

🌀 BREAK 🌀  
18:05-18:35

## In Vitro Systems

18:35-19:05: "Bioreactors in Musculoskeletal Tissue Engineering"  
*Philipp Heher*

19:15-19:45: "Skeletal Muscle Tissue Regeneration: Biomaterials and Microtechnologies"  
*Sahar Salehi*

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

08:30-11:40

## In Vitro Systems

08:30-09:00: "Lab-on-a-Chip Technologies for BioScience Applications"  
*Peter Ertl (to be determined)*

09:10-09:40: "3D Bioprinting"  
*Aleksandr Ovsianikov*

## Open Innovation

09:50-10:20: "Open Innovation in Science"  
*Veronika Hruschka*

## Tendon & Ligament

10:30-11:00: "Tendon Degeneration and Repair - Lessons from Tendon Development and Ageing?"  
*Andreas Traweger*

11:10-11:40: "Silk as versatile Biomaterial for Musculoskeletal Tissue Engineering"  
*Andreas Teuschl*

🌀 BREAK 🌀  
11:40-16:30

**Monday, January 15<sup>th</sup>**

**16:30-19:00**

## Angiogenesis & Prevascularization

**16:30-17:00:** “Angiogenesis and organotypic vasculature”  
*Wolfgang Holnthoner*

**17:10-17:40:** “Pre-clinical testing and characterization of shockwave therapy”  
*Paul Slezak*

**17:50-18:20:** “Biophysical therapies in regenerative medicine and their impact on vascularization”  
*Peter Dungal*

## Neuro

**18:30-19:00:** “Regeneration of the nervous system- mechanisms and models”  
*David Hercher*

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

**08:30-11:40 / 16:30 – 17:40**

## Bone

**08:30-09:00:** “The clinical Impact of delayed Bone Healing and Non-Union in Long Bone Fractures”  
*Albert Kröpfl*

**09:10-09:40:** “Gene Therapy”  
*Ara Hacobian (to be determined)*

Tuesday, January 16<sup>th</sup>

08:30-11:40 / 16:30 – 17:40

## Cartilage

09:50-10:20: “Cartilage Engineering: From **Bench** to Bedside”  
*Sylvia Nürnberger*

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

## Muscle

11:10-11:40: “Hippo pathway in heart development and disease”  
*Giancarlo Forte*

❧ **BREAK** ❧  
11:40-16:30

16:30-17:00: “Role of Muscle Satellite Cells in Health and Disease”  
*Pete Zammit*

17:10-17:40: “Transgenic Animal Models”  
*Nicolas Figeac*

❧ **SOCIAL EVENT** ❧  
18:00

**Wednesday, January 17<sup>th</sup>**

**08:30-10:40**

## Imaging

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

*Pavol Szomolanyi (to be determined)*

**09:10-09:40:** “Hard Tissue Histology-Methods and Quantitative Evaluation“

*Stefan Tangl*

**09:50-10:20:** “Morphological In Vitro Methods: from life cell imaging to high resolution electron microscopy“

*Sylvia Nürnberger*

**10:30-11:00:** “Micro-CT Imaging of Materials and Tissues in Preclinical Models“

*Patrick Heimel*

**11:10-11:40:** “Assessment of bone scaffold deformation behaviour using 4D microtomography“

*Dan Kytir*

🌀 **Closing Remarks** 🌀

## Registration

**Early bird registration until December 12<sup>th</sup>**

**There will be space for posters in the meeting room and an organized poster discussion with the lecturers during the coffee breaks.**

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