

# Structured MD/PhD curriculum:

**"Molecular Mechanisms of Regenerative Processes"** 



## **Organisation:**

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PROTEOME ALLIANCE



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## Location:

University Library Rostock Albert-Einstein-Str. 6, seminar room 11/12 18059 Rostock

# Molecular Mechanisms of

# **Regenerative Processes**

# **Cooperation Partners:**

- Graduate Academy of the University of Rostock
- Proteome Alliance e. V.

### In the Rostock University Library



The conference is open to all interested students, MD/PhD students, Postdocs, faculty, and staff

### **General Information**

The Participants `Camp is an event of the structured study path *Molecular Mechanisms of Regenerative Processes* at the University of Rostock.

In this context our junior scientists take the opportunity to present their topics, which are focused among others on stem cell research and the involvement of genes and proteins in regenerative processes related to human health.

This interdisciplinary and international orientated programme is offered by the University Medicine Rostock and provides qualified young scientists the opportunity to gain an MD degree (*Dr. med. (medicinae)*), or a PhD degree (*Dr. rer. hum. (rerum humanarum)* or *Dr. rer. nat. (rerum naturalium*)) in the field of Life Science.

Med. Biotechnologists with a Master degree and students of the University Medicine (prerequisite: 1. state examination) as well as scientists of the Faculty of Mathematics and Natural Sciences and of the Faculty of Agricultural and Environmental Sciences (prerequisite: Dipl./ Master's degree in Life Science) are most welcome to enrol for our curriculum.

## Programme

#### Time Thursday; 6th December, 2012

#### 16:00 Prof. M. O. Glocker

Welcome and Introduction

#### Keynote Lecture

#### 16:15 Dr. U. Pecks

Lipids and lipoproteins in fetal development - on the way towards pathophysiological molecular signatures

#### Session I

#### 17:00 Prof. O. Hakenberg

Clinical Therapies for Bladder Cancer patients: established procedures and novel developments

17:20 G. Mukherjee

Phosphopeptide enrichment strategies: a critical comparison

- 17:40 **Prof. G. Gradl/ Dr. P. Herlyn** CRPS - the clinical entity and some current approaches of experimental modeling
- 18:00 M. Jacobs Characterisation of Complex Regional Pain Syndrome I by mass spectrometric methods
- 18:20 Summary

#### Friday; 7th December, 2012

09:00 Prof. M. O. Glocker Welcome and Introduction

#### Keynote Lecture

09:15 Dr. D. Suckau

Molecular Histopathology by MALDI-MS Imaging: Accessing the Molecular Tissue Morphology and Disease

#### Session II

10:00 Prof. M. O. Glocker

Next Generation Autoimmune Disease Diagnostics Based on Mass Spectrometric and Peptide Chip Epitope Analysis -Approaching Individualized Medicine

10:20 M. Al-Majdoub

Mass spectrometric epitope mapping with polyclonal antibodies

10:40 Coffee break

## Programme

#### Time Friday; 7th December, 2012

#### Poster presentation

#### 11:00 A. Schade

An Innovative non-viral strategy for efficient micro-RNA delivery in human mesenchymal stem cells

#### 11:15 M. Ludwig

CD117+ AT2R stimulated bone marrow cells protect neonatal cardiomyocytes under hypoxic condition

11:30 K. Opuni

Using a novel mass spectrometric epitope mapping without immobilization of the antibody to develop a screening procedure in autoimmune patients for personalized therapies

11:45 S. Zaatreh

Implant-related infections: an in-vitro analysis of the periprosthetic infection

12:00 R. Heinemann

Proteome profiling of the Complex Regional Pain Syndrome I - related rat model: "Exaggerated Trauma Response (ETR)"

12:15 J. Yang

Proteome Signatures of Free Flaps - Protein Profile Changes During Ischemia and Reperfusion

#### 12:30 M. Wölter

Affinity-Mass Spectrometry: A Proteome Signature for Intra-Uterine Growth Restriction. Reveals Pathological Protein Glycosylation Aberrations in Umbilical Cord Blood

12:45 Summary and Farewell