Structured MD/PhD curriculum:

„Molecular Mechanisms of Regenerative Processes“

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MSc. Marion Ludwig
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E-Mail: marion.ludwig@med.uni-rostock.de

Organisation:

Head of the curriculum committee:
Prof. Dr. Michael O. Glocker
Phone: +49 381 494 4930
E-Mail: michael.glocker@med.uni-rostock.de

Location:

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

Cooperation Partners:

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

http://www.med.uni-rostock.de/index.php?id=811
## 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

### Thursday; 6th December, 2012

<table>
<thead>
<tr>
<th>Time</th>
<th>Keynote Lecture</th>
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<tbody>
<tr>
<td>16:00</td>
<td>Prof. M. O. Glocker</td>
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<tr>
<td></td>
<td>Welcome and Introduction</td>
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### Session I

<table>
<thead>
<tr>
<th>Time</th>
<th>Keynote Lecture</th>
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<tbody>
<tr>
<td>16:15</td>
<td>Dr. U. Pecks</td>
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<tr>
<td></td>
<td>Lipids and lipoproteins in fetal development - on the way towards pathophysiological molecular signatures</td>
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<tr>
<th>Time</th>
<th>Keynote Lecture</th>
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<tbody>
<tr>
<td>17:00</td>
<td>Prof. O. Hakenberg</td>
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<tr>
<td></td>
<td>Clinical Therapies for Bladder Cancer patients: established procedures and novel developments</td>
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<tr>
<th>Time</th>
<th>Keynote Lecture</th>
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<tbody>
<tr>
<td>17:20</td>
<td>G. Mukherjee</td>
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<td>Phosphopeptide enrichment strategies: a critical comparison</td>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>18:00</td>
<td>M. Jacobs</td>
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<tr>
<td></td>
<td>Characterisation of Complex Regional Pain Syndrome I by mass spectrometric methods</td>
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### Friday; 7th December, 2012

<table>
<thead>
<tr>
<th>Time</th>
<th>Keynote Lecture</th>
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<tbody>
<tr>
<td>09:00</td>
<td>Prof. M. O. Glocker</td>
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<tr>
<td></td>
<td>Welcome and Introduction</td>
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### Poster presentation

### Keynote Lecture

<table>
<thead>
<tr>
<th>Time</th>
<th>Keynote Lecture</th>
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</thead>
<tbody>
<tr>
<td>09:15</td>
<td>Dr. D. Suckau</td>
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<tr>
<td></td>
<td>Molecular Histopathology by MALDI-MS Imaging: Accessing the Molecular Tissue Morphology and Disease</td>
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### Session II

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<tr>
<th>Time</th>
<th>Keynote Lecture</th>
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<tbody>
<tr>
<td>10:00</td>
<td>Prof. M. O. Glocker</td>
</tr>
<tr>
<td></td>
<td>Next Generation Autoimmune Disease Diagnostics Based on Mass Spectrometric and Peptide Chip Epitope Analysis - Approaching Individualized Medicine</td>
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<tr>
<th>Time</th>
<th>Keynote Lecture</th>
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<tbody>
<tr>
<td>10:20</td>
<td>M. Al-Majdoub</td>
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<tr>
<td></td>
<td>Mass spectrometric epitope mapping with polyclonal antibodies</td>
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### Coffee break

## Programme

### Friday; 7th December, 2012

<table>
<thead>
<tr>
<th>Time</th>
<th>Keynote Lecture</th>
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<tbody>
<tr>
<td>11:00</td>
<td>A. Schade</td>
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<tr>
<td></td>
<td>An Innovative non-viral strategy for efficient micro-RNA delivery in human mesenchymal stem cells</td>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>11:15</td>
<td>M. Ludwig</td>
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<tr>
<td></td>
<td>CD117+ AT2R stimulated bone marrow cells protect neonatal cardiomyocytes under hypoxic condition</td>
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<tr>
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<tbody>
<tr>
<td>11:30</td>
<td>K. Opuni</td>
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<tr>
<td></td>
<td>Using a novel mass spectrometric epitope mapping without immobilization of the antibody to develop a screening procedure in autoimmune patients for personalized therapies</td>
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<tr>
<th>Time</th>
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<tr>
<td>11:45</td>
<td>S. Zaatreh</td>
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<td>Implant-related infections: an in-vitro analysis of the periprosthetic infection</td>
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<tr>
<td>12:00</td>
<td>R. Heinemann</td>
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<td></td>
<td>Proteome profiling of the Complex Regional Pain Syndrome I - related rat model: &quot;Exaggerated Trauma Response (ETR)&quot;</td>
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<tr>
<td>12:15</td>
<td>J. Yang</td>
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<tr>
<td></td>
<td>Proteome Signatures of Free Flaps - Protein Profile Changes During Ischemia and Reperfusion</td>
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<tr>
<td>12:30</td>
<td>M. Wölter</td>
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<tr>
<td></td>
<td>Affinity-Mass Spectrometry: A Proteome Signature for Intra-Uterine Growth Restriction, Reveals Pathological Protein Glycosylation Aberrations in Umbilical Cord Blood</td>
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<tr>
<td>12:45</td>
<td>Summary and Farewell</td>
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### Poster presentation