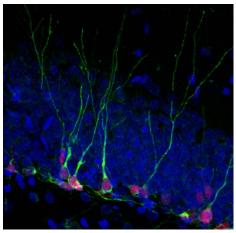


## **PMU Training Course**

# Analysis of neural stem/progenitor cell proliferation and fate

June 23-26, 2014



Adult neurogenesis in the dentate gyrus of the hippocampus (P. ROTHENEICHNER, L. AIGNER, S. COUILLARD-DESPRES)

Institute of Molecular Regenerative Medicine &
Institute of Experimental Neuroregeneration
Spinal Cord Injury and Tissue Regeneration Center
Salzburg
(SCI-TReCS)

Paracelsus Medical University (PMU)
Salzburg, Austria





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## **Training objectives**

Teaching of immunohistochemical techniques for the study of neural stem/progenitor cells (NPCs) proliferation and fate *in vivo* and *in vitro*, including the preparation and maintenance of neural progenitor cultures and the analysis of relevant parameters.

#### **Duration**

4 days (28 hours) in small groups (max. 10 participants); 25% lectures, 75% practical work

## Lectures content and practical work

- in vivo imaging of neurogenesis using bioluminescence imaging
- in vivo labeling and immunohistochemical detection of proliferating cells using BrdU
- survival and cell fate analyses using immunohistochemistry
- survival and cell fate analyses in transgenic mice using tamoxifen-activable
   Cre recombinase and fluorescent reporter systems
- isolation and culture of NPCs

#### Credits

For successful course participation 2 ECTS points can be given.

## **Prerequisites**

Students (starting from Bachelor level) are especially invited. Experience in basic cell culture techniques is advantageous.

#### Course leaders

Ludwig AIGNER, Francisco J. RIVERA, Barbara KLEIN

Contact: <u>barbara.klein@pmu.ac.at</u>

#### Scientific advisors

Ludwig AIGNER, Sebastien COUILLARD-DESPRES, Francisco J. RIVERA, Sebastien ILLES, Julia MARSCHALLINGER, Barbara KLEIN



#### Venue

Institute of Molecular Regenerative Medicine & Institute of Experimental Neuroregeneration from the Spinal Cord Injury and Tissue Regeneration Center Salzburg (SCI-TReCS), Paracelsus Medical University, Strubergasse 21, 5020 Salzburg, Austria





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This training course is organized in cooperation with

- EU FP7 project INMiND
  - Imaging of Neuroinflammation in Neurodegenerative Disection www.uni-muenster.de/INMiND



- FWF Special Research Program (SFB) F44
   Cell Signaling in Chronic CNS Disorders
   www.uibk.ac.at/pharmazie/pharmakologie/sfb-f44
- ANA Austrian Neuroscience Association www.austrian-neuroscience.at



## Student travel grants

Travel grants for students up to € 250.- are sponsored by SFB F44 and ANA. Application: Please send (1) your CV (1000 words maximum) and (2) a "personal statement" of research interests, experience and motivation to attend the course (not to exceed 500 words) to Barbara Klein (barbara.klein@pmu.ac.at). Deadline: April 23, 2014

## Registration fee

Early bird (until April 23): € 210.- normal / € 110.- reduced (for students & ANAmembers)

**April 23 - May 23:** € 260.- normal / € 160.- reduced (for students & ANA-members)

## For registration please contact:

Institute of Molecular Regenerative Medicine, Paracelsus Medical University, Salzburg Regina Schöberl (Assistant): <a href="mailto:regina.schoeberl@pmu.ac.at">regina.schoeberl@pmu.ac.at</a>