PMU Training Course

Analysis of neural stem/progenitor cell proliferation and fate

June 23-26, 2014

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
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: barbara.klein@pmu.ac.at

Scientific advisors

Ludwig AIGNER, Sebastien COUILLARD-DESPRES, Francisco J. RIVERA, Sebastien ILLES, Julia MARSCHELLINGER, 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

This training course is organized in cooperation with

- EU FP7 project INMiND
  - Imaging of Neuroinflammation in Neurodegenerative Diseases
    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 & ANA-members)
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): regina.schoebelr@pmu.ac.at