



UNIVERSITY OF ZAGREB
SCHOOL OF MEDICINE
Šalata 3, Zagreb, Croatia



Application of neural stem cells and mouse models in neuroscience

Practical course and workshop

02.10. - 05.10.2013.

Croatian Institute for Brain Research, School of Medicine, University of Zagreb,
Šalata 12, Hr-10000 Zagreb, Croatia

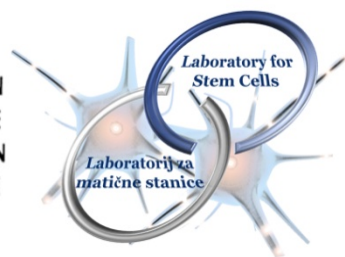
Supported by:

The International Centre for Genetic Engineering and Biotechnology
Central European Initiative

Local organizer and Workshop coordinator:



HRVATSKI
INSTITUT ZA
ISTRAŽIVANJE
MOZGA
CROATIAN
INSTITUTE
FOR BRAIN
RESEARCH



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The main goal of the workshop is to cover a broad spectrum ranging from isolation of stem cells, their transplantation to analyses. The workshop will cover theoretical and practical elements of:

- Regenerative potential of neural stem cells
- Mouse models for stroke, neural lesion and neurodegenerative diseases
- Transplantation of stem cells using stereotaxy
- Microscopy in neuroscience
- Bioluminescence in neuroscience



Maximum number of participants: 24

Accommodation: Dormitory of the Croatian Institute for Brain Research
Shared double rooms

Travel and subsistence grants are available for limited number of participants based on CV and motivation letter.



PROGRAMME:

❖ Day 1:

Lectures and seminars:

Dinko Mitrečić, Laboratory for stem cells, School of Medicine, University of Zagreb, Croatia
Application of stem cells in brain diseases: current concepts and perspectives

Željka Krsnik, Neurobiology Department, School of Medicine, Yale University, USA
Development of the human cerebral cortex

Emanuele Buratti, Molecular Pathology Group, ICGEB, Trieste, Italy
From cellular to animal models of TAR DNA Binding Protein 43 (TDP-43) aggregation

Darko Bosnakovski, Faculty of Medical Sciences, University Goce Delcev, Stip, FYR Macedonia
Understanding the molecular mechanism of neuromuscular diseases using gene inducible system-in vitro and in vivo models for FSHD

Charles Nicaise, Department of Pathology, Erasme Hospital, Université Libre de Bruxelles, Belgium
Cervical spinal cord injuries: clinically-relevant animal models and experimental therapies targeting glutamate excitotoxicity

❖ Day 2 and Day 3:

Half-day practical hands-on sessions

- Regenerative potential of neural stem cells (stem cell cultures)
- Mouse models for stroke (middle carotid artery occlusion model)
- Transplantation of stem cells using stereotaxy (stereotaxy surgical session)
- Microscopy in neuroscience (confocal/electron microscope session)

❖ Day 4:

Poster session and round tables

Special seminar on bioluminescence with hands on session supported by Perkin Elmer

