

Advanced Hands-on the Rodent Brain: from intracellular trafficking to brain connectome

26 April – 12 May 2017, ICVS Institute, Braga, Portugal

BLOCK 1

	26 April - DAY 1	27 April - DAY 2	28 April - DAY 3
MORNING (09:00-12:30)	Course organization - Brief brain anatomy - patch clamp introduction - Preparation of recording solutions	Prepare brain slices	Prepare brain slices
AFTERNOON (13:30-17:30)	Preparation of cutting solutions &transcardial perfusion & fresh brain extraction practice	Patch clamp recordings	Patch clamp recordings

BLOCK 2

	2 May - DAY 1	3 May - DAY 2	4 May - DAY 3	5 May - DAY 4
MORNING (09:00-12:30)	Theory about atlas + stereotaxic surgeries	stereotaxic procedures + surgery + injection + cannula implanatation	Theory - optogenetics + Behavior optogenetics	electrophysiology whole field
AFTERNOON (13:30-17:30)	Stereotaxic procedures + surgery		single-cell extracellular electrophysiological recordings - optogenetic stimulations	Electrophysiological data analysis

BLOCK 3

	8 May - DAY 1	9 May - DAY 2	10 May - DAY 3	11 May - DAY 4	12 May DAY 5
MORNING (09:00-12:30)	Brain macrodissection (with and without brain slicer)	Intracellular trafficking and localization - neurosynaptosomes & WB validation	PSD-extrasynaptic fractions - pre & postsynaptic fractions	Brain processing - validation & more	Technical platforms &limitations - overall discussion
AFTERNOON (13:30-17:30)	Electron microscopy (3D reconstruction, Immunogold, double labeling)				Quiz + evaluation