

**Main Laboratories and facilities:**

- Labs of Behavioural Neurophysiology and neuropsychopharmacology for animal models
- Labs for in vivo, ex vivo and in vitro electrophysiology
- Labs of Molecular Pharmacology with in vitro models
- Animal houses for animal models (primates, small rodents, amphibians)
- Labs for in vivo, ex vivo and in vitro microscopy (two photon, confocal, epifluorescence and optical microscopies)



**Research topics:**

- Phenotyping and validation of new pathways to identify early disease biomarkers and/or novel pharmacological targets: focus on neurodegenerative, psychiatric, neurodevelopmental disorders
- Neuronal and synaptic functionality and dysfunction in physiological and pathological conditions: focus on neuroinflammation, neuromodulation, on glutamatergic and monoaminergic systems;
- Studies on brain-body interaction and the interaction of the brain with the environment: focus on endocannabinoid/paracannabinoid system, and on the neurobiological effects of psychoactive substances

**Main methods:**

- Primate, Rat and Mouse models
- Behavioral assessments
- Electrophysiological analysis
- Gene expression pattern analysis
- Neurotransmitter assessment by microdialysis/HPLC
- Primary cultures of neuronal and glial cells
- Molecular and protein analysis

