

Instituto de Neurociencias Federico Olóriz

Líneas de investigación

Neurodegenerative diseases. Neurodegeneration and neuroprotection mechanisms

- Neurochemistry and biomarkers of Parkinson's disease
- Neuroprotective mechanisms in experimental Parkinson's electrophysiological, neurochemical and behavioural studies
- Role of aminopeptidases in neurodegenerative processes
- Neuropsychological evaluation and rehabilitation of brain damage

Neurobiology of emotional disorders and behaviour

- Risk factors and prevention in mental illnesses
- Psychiatric genetics and pharmacogenetics
- Neuropsychology and clinic of schizophrenia
- Evaluation, treatment and prevention of addictive behaviours

Memory, learning and neuroplasticity

- Psychobiology of learning and memory
- Neurobiology of aversive gustatory learning

Neuroendocrinology and metabolism

- Study of the hormones of the hypothalamic-pituitary-gonad axis in experimental animals and humans, and their interactions with hormones of the growth, thyroid and stress axes
- Hormone-mediated regulation of gene expression

Neurobiology of pain and its treatment

- Pathophysiology and treatment of headaches and fibromyalgia
- Orofacial pain
- Cellular receptors and molecular mechanisms involved in the effect of analgesics
- Development of new analgesics
- Evaluation of pain and analgesic procedures in humans

Mechanisms of cell death (apoptosis and necrosis)

- Viability in cell and tissue transplantation
- Study of the antigenic and functional phenotype of different cell populations using primary cultures

Psychiatry and neurosciences

- Schizophrenia
- Substance use and abuse (and addictive disorders)
- Personality

Brain function, cognitive development and aging

- Experimental neuroteratology
- Memory and aging
- Ontogeny of behaviour