Mechanisms of Neurotoxicity

Description

This line investigates the neural mechanisms involved in the neurotoxicity of environmental toxicants of relevance for the public health by using in vitro neural systems. The primary target is the identification and evaluation of neurotoxic agents and the characterization of the induced neuronal alterations, some of them common to underlying mechanisms of several neural and neurodegenerative diseases. We focus on the study of alterations of GABAergic and glutamatergic neurotransmission. We are also developing in vitro models and strategies to predict human toxicity, of great interest in the EU for the testing of the safety/toxicity of new and existing compounds for the human health.

The subline is a group member of the CIBER de Epidemiología y Salud Pública (CIBERESP), giving a projection of the investigations in the area of the Risk Assessment and Human Health.

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Recent publications

Mireia Galofré, Zoila Babot, Daniel A. García, Susana Iraola, Eduard Rodríguez-Farré, Anna Forsby, Cristina Suñol. $GABA_A$ receptor and cell membrane potential as functional endpoints in cultured neurons to evaluate chemicals for human acute toxicity. *Neurotoxicol. Teratol. (2009), doi:10.1016/j.ntt.2009.01.01.*

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