

## **RESEARCH TOPIC MEM 21**

# Cancer neuroscience: translational opportunities for glioblastoma Curriculum MEM

**Laboratory name** Laboratory of Pharmacology and Brain Pathology

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### Abstract

Over the last years, several studies have highlighted the essential role of the tumor microenvironment, where the nervous system is now emerging as a novel and crucial facilitator of cancer growth.

The project will investigate the cross-talk between the neuronal microenvironment and glioblastoma (GBM) cells, and how this interplay shapes tumor growth, invasion, and impairment of anti-cancer response. The research plan will be based on solid and settled experimental tools present in the lab: a cell bio-bank of patient-derived GBM primary cell lines, neuron-tumor co-cultures and migration assays, co-culture transcriptomic and metabolomic data sets, patient-derived xenografts (PDXs) in vivo system.

## Main technical approaches

Basic cellular and molecular skills such as in vitro cell growth and biochemical analyses.

# Type of contract

Scholarship of  $\notin$  21.000 gross per year awarded by Istituto Clinico Humanitas. This sum is subject to IRPEF income tax and exempt from social security contributions.

Borsa di studio pari a € 21.000 annui lordi erogata da Istituto Clinico Humanitas. Importo soggetto a tassazione IRPEF ed esente da contribuzione previdenziale.

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