

12-months RESEARCH POSITION at the University of Milan-Bicocca, ITALY

TOPIC: THE VASCULAR CONTRIBUTION IN CHEMOTHERAPY-INDUCED PAINFUL PERIPHERAL NEUROPATHY: BEYOND THE NEUROCENTRIC VIEW AND TOWARDS NOVEL THERAPEUTIC TARGETS

FUND: PRIN (PROGETTI DI RICERCA DI RILEVANTE INTERESSE NAZIONALE) 2022

Position open

A 12-month research position is available in the Experimental Neurology Unit (ENU) of the School of Medicine and Surgery, under the coordination of Dr. Valentina Carozzi, PhD in Neuroscience, Assistant professor of Anatomy and Histology.

He/she will work in a multidisciplinary group encompassing biologists, biotechnologists, neurologists, engineers, and will develop the project in collaboration with bioinformaticians of the CNR (Consiglio Nazionale delle Ricerche) and of the laboratory of cancer genomics at the School of Medicine and Surgery.

Brief description of the project

Chemotherapy-induced peripheral painful neuropathy (CIPPN) with severe and long-lasting debilitating consequences on cancer patients represents "THE" most problematic side effect of chemotherapy.

The project aims at the identification of:

- ✓ morphostructural vascular abnormalities related to CIPPN development and chronicization over time, through Synchrotron-based X-Ray Computer-assisted Microtomography
- ✓ molecular key actors/new pathways involved in its pathogenesis through Next generation sequencing and immunolabeling
- ✓ new effective therapeutic strategies able to counteract the vascular changes induced by chemotherapy through *in vitro* advanced combined models of peripheral neurons and endothelial cells.

Job requirements

We are seeking for a highly motivated postdoc with abilities in histology (stainings, immunohistochemistry, use of microtome, light microscopy) and molecular techniques (RT PCT, western blot). Abilities in *in vivo* research are also welcome.

Applicants would likely also have: - a PhD in neuroscience or similar - established lab experience

Applications should be submitted to valentina.carozzi1@unimib.it and should include a CV with a list of publications, research experience and contact information.