UNIVERSITÉ Clermont Auvergne
INSTITUT SCIENCES DE LA VIE, SANTÉ, AGRONOMIE, ENVIRONNEMENT
UFR de Pharmacie

Postdoctoral position

NEURO-DOL

Neuroinflammation and neuropathic pain in chemotherapy-induced peripheral neuropathy models

Research Unit: NEURO-DOL, UMR1107, Inserm, Université Clermont Auvergne (Dir: Pr Radhouane Dallel)
Team: Fundamental and clinical pharmacology of Pain (Dir: Dr Jérôme Busserolles)
Website: neurodol.uca.fr

Location: Faculty of Pharmacy, 28 place Henri Dunant, F-63000 Clermont-Ferrand, France
https://maps.google.com/maps?hl=fr&gl=fr&um=1&ie=UTF-8&fb=1&sa=X&ftid=0x47f71b9091e983af:0xd13ba84814facef4

Start date: January 2026
Duration: 24 months

We seek to hire a highly motivated postdoctoral researcher to:

- Describe and compare neuroinflammatory processes associated with CIPN and traumatic neuropathy.
- Identify pharmacological targets through comparisons between animal models.
- Assess pharmacological responses (pain and neuroinflammation) to compounds targeting these neuroinflammatory processes.

In vivo and ex vivo experiments will be carried out in rat models of CIPN (oxaliplatin, paclitaxel, vincristine, and bortezomib) and traumatic neuropathy (chronic constriction injury). Neuropathic symptoms will be evaluated using behavioral assays (electronic von Frey, paw immersion test), measurement of blood concentrations of neurofilament light chain (NfL), and assessment of intraepidermal nerve fiber density in the paw. Neuroinflammation will be studied through monitoring cytokines in blood, spinal cord, and dorsal root ganglia (DRG); analyzing cytokine receptor gene expression in spinal cord and DRG; and phenotyping leukocytes in blood and spinal cord by flow cytometry.

The candidate should hold a PhD in Neurobiology, Neuropharmacology, or Neuroimmunology. Possession of authorization for animal experimentation is highly recommended. The candidate should have a solid background in cellular and molecular biology (RT-qPCR, flow cytometry) and a strong interest in pain research and molecular/cellular neuroscience, with a particular focus on immunology and inflammation. Experience in pain behavior assessment in animals would be optimal.

The project is funded by the *Ligue Contre le Cancer* (“Lutte contre les douleurs liées aux cancers”) 2025 and coordinated by Prof. David Balayssac.

The candidate will benefit from a stimulating, interactive, and collaborative research environment. The team is part of the NEURO-DOL UMR1107 laboratory, dedicated to pain research, focusing on the cellular and molecular mechanisms underlying chronic pain and its affective/cognitive comorbidities, as well as the development of new pharmacological therapeutic strategies.

Applicants should email a CV, a cover letter detailing research experience and interests, and the contact information of two referees to: **David Balayssac** – david.balayssac@uca.fr