



**University of Padova
Department of Biomedical Sciences**

Pre/Postdoctoral Position

A 12-18 months pre/postdoctoral position is available in the Migraine Pathophysiology Laboratory directed by Prof. Daniela Pietrobon in the Dept of Biomedical Sciences and the Padova Neuroscience Center of the University of Padova.

Project title: Mechanisms of susceptibility to cortical spreading depression in migraine: a multiscale approach (PRIN 2022 grant of the Italian Ministry of Research)

Project description: An aim of the project is to investigate the mechanisms of initiation and propagation of cortical spreading depression (CSD) in wild-type mice and the mechanisms underlying its facilitation in FHM1 and FHM2 knock-in mouse models of familial hemiplegic migraine, a monogenic form of migraine with aura. Another aim of the project is to investigate the mechanisms underlying facilitation of CSD initiation by sleep deprivation, a known migraine trigger. To achieve these aims, patch-clamp recordings combined with intrinsic optic signal imaging, glutamate imaging and pharmacology in acute cerebral cortex slices, as well as glutamate imaging in awake-head fixed and freely behaving mice will be used.

Required skills: Expertise in neurophysiology and/or in patch-clamp recordings in brain slices or cultured cells is a mandatory prerequisite. Previous experience with two photon fluorescence imaging and animal handling/surgery is welcome and considered a plus.

Position: The position and the salary will be commensurate with qualifications. Starting date: January 2024. For further information, please contact Daniela Pietrobon (daniela.pietrobon@unipd.it)

How to Apply: Please submit your CV, a cover letter highlighting your expertise and motivations and contact details of two or three professional references to Daniela Pietrobon (daniela.pietrobon@unipd.it)