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)