# Two PhD positions in Neuroscience, Brain Mind Institute, EPFL, Lausanne / Switzerland

## Description

Two PhD positions are available to investigate synaptic and circuit mechanisms underlying psychiatric disorders in genetic mouse models of behavioral and cognitive dysfunctions. The projects will involve a combination of state-of-the-art tools, including a selection of the following approaches: *ex vivo* patch-clamp analyses, single molecule dynamics imaging, optical voltage imaging, *in vivo* fiber photometry, polysomnographic recordings, and behavioral analyses.

The projects will be carried out in the Laboratory of Behavioral Genetics at the Brain Mind Institute of the Ecole Polytechnique Fédérale de Lausanne (EPFL) under the supervision of Prof. Carmen Sandi and Dr. Simone Astori. The selected candidates will join the EPDL-EDNE Doctorate program. The Brain Mind Institute (https://www.epfl.ch/schools/sv/bmi) at the EPFL is a multicultural and dynamic academic environment.

These positions will be part of a larger (14 in total) Early Stage Researcher PhD positions funded by the Innovative Training Network "Syn2Psy-Synaptic Dysfunction in Neuropsychiatric Disorders", an European Union H2020 Marie Sklodowska-Curie Action. Syn2Psy (grant agreement No. 813986).

Applicants should have a Master degree (M.Sc. or equivalent graduation) in life sciences, physics or related areas. Previous experience in at least one of the above indicated techniques and approaches, analysis of imaging data, and coding in Matlab, are desirable. In addition, the following eligibility criteria apply: i) Applicants should not hold a PhD degree and must be in the first 4 years (full-time equivalent) of their research careers prior to the recruitment. This is measured from the date when they obtained the degree that would formally entitle them to embark on a Doctorate, either in the country in which the degree was obtained or in the country in which the research training is provided, irrespective of whether or not a Doctorate is the objective. ii) Trans-national mobility is required. Immediately prior to their recruitment, researchers must not have resided or carried out their main activity in the country of their host institution for more than 12 months in the 3 years prior to their recruitment. Short stays are not accountable. iii) Proficiency in English language corresponding to at least level B2 on the Common European Framework of Reference for Languages is required.

Interested applicants should submit their application through the EPFL-EDNE Doctorate program website (https://phd.epfl.ch/neuroscience-openings) before 15$^{th}$ April 2019. Short-listed candidates will be invited to interviews in Lausanne on 19-21 June 2019. Positions will start on 1st September 2019 for a duration of 4 years.