

Call for a Research and Training Fellowship on “Study of visual perception in a genetic rat model of autism through psychophysics and neurophysiology experiments” Neuroscience Area, Prof. Davide Zoccolan.

The above mentioned selection is based on academic qualifications only.

Title of the project: Study of visual perception in a genetic rat model of autism through psychophysics and neurophysiology experiments.

Duration: 12 months starting from July 2025

Amount of the fellowship: € 1800,00 net per month.

Research activity: Study of visual perception on rats bearing a genetic mutation associated to autism in humans. The experimental approach will include psychophysical tests of visual perception on mutant and wild type animals, as well as neuronal recordings from the visual cortex of these rats using cutting-edge electrode arrays (Neuropixels 1.0 e 2.0).

Requirements:

- **Title:** MS in Psychology, Cognitive Sciences or Neuroscience
- **experience** with behavioral measurements in rodents, ideally through perceptual tests based on psychophysical methods;
- **experience** in carrying out surgical procedures to implant electrode arrays in cortex and in using these electrodes to record extracellular neuronal signals;
- **good knowledge** of programming languages such as Matlab or Python, aimed at carrying out statistical analyses and visualization of behavioral and neuronal data.
- Good **competence in English** (B2 level).

Funded by:

R_H2020_PoC_ERC_NEUR_Zoccolan_0577;

R_PRIN_2022_NEUR_Zoccolan_0921

Applications and all the required documents must be sent by 18th June 2025, 01:00 p.m. through the online procedure available at the following link:

<https://pica.cineca.it/sissa/borsa-ricercaeperfezionamento-zoccolan-studio5/domande/>

For further information, please contact vmirabel@sissa.it or iancer@sissa.it