**Postdoctoral position for the study of the functional and structural plasticity of neurons underlying memory and neurological diseases**

A 2-year Junior Postdoctoral position is about to be open at the **Center for Synaptic Neuroscience and Technology (NSYN) of the Italian Institute of Technology (IIT)**, at IRCCS San Martino Hospital (Genoa, Italy) for the study of the functional and structural plasticity underlying memory and disease (see [Grasselli et al., *Cell Rep* 2016 14:2546–2553](https://www.ncbi.nlm.nih.gov/pubmed/?term=26972012); [Paonessa et al., *Proc. Natl. Acad. Sci. USA* 2016 113:91-100](https://www.ncbi.nlm.nih.gov/pubmed/?term=26699507); [Grasselli et al., 2013 *Br J Pharmacol* 2013 168:502-17](https://www.ncbi.nlm.nih.gov/pubmed/?term=22924679); [Grasselli et al., *PLoS ONE* 2011 6: e20791](https://www.ncbi.nlm.nih.gov/pubmed/?term=21695168); NSYN webpage: [https://www.iit.it/it/centers/iit-central-research- laboratories/nsyn-unige](https://www.iit.it/it/centers/iit-central-research-laboratories/nsyn-unige)).

**The project** is supported by Marie Skłodowska-Curie Actions (MSCA-IF-2018 “FunStructure”). It focuses on the cerebellum as a model brain area and will take advantage of conditional knockout mouse strains, *in vivo* delivery of viral vectors for protein/shRNA expression, confocal microscopy, patch-clamp electrophysiology, optogenetics and time-lapse imaging. It aims at clarifying how modulations of intrinsic excitability affect axonal morphology and how axonal structural plasticity affects circuit function in memory coding and in the pathogenesis of several diseases, including Multiple Sclerosis and Epilepsy.

**The candidate** will be holding a relevant PhD, be highly motivated, collaborative, and able to work independently. He/she will have excellent written and verbal communication skills in English. Previous experience in patch-clamp electrophysiology in brain slices and data analysis, stereotactic surgery, immunohistochemistry, confocal microscopy and image analysis will be appreciated. Training for the missing required technical skills will be available.

**Fondazione Istituto Italiano di Tecnologia** (IIT) is a public scientific Research Institute established in 2003 by the Italian Ministries of Research and of Economy, in order to promote excellence in basic and applied research and to facilitate technological development. Its research lines range from Neuroscience, Molecular Biology and Pharmacology, to Computer Science, Nanotechnology, Nanomaterials and Robotics. Within IIT, NSYN is a highly interdisciplinary and collaborative center, devoted to the Neurobiology of Disease and to the development of new Neurotechnologies aimed at clinical translation.

Please, send a motivation letter (including major scientific and technical expertise, achievements, professional goals in the short- and mid-/long-term, and motivations for the interest in the specific call), a CV (including publications) and names of two referees to **Dr. Giorgio Grasselli** ([giorgio.grasselli@iit.it](mailto:giorgio.grasselli@iit.it)) and **Dr. Fabio Benfenati** ([fabio.benfenati@iit.it](mailto:fabio.benfenati@iit.it)) explicitly referring to the

“FunStructure” project and where this announcement was read. Applications will be reviewed until

**summer 2019.** Shortlisted applicants will be invited for skype/in-person interview.

The position will start by **fall 2019**.

In order to comply with Italian law (art. 23 of Privacy Law of the Italian Legislative Decree n. 196/03), the candidate is kindly asked to give his/her consent to allow Istituto Italiano di Tecnologia to process his/her personal data. We inform you that the information you provide will be solely used for the purpose of evaluating and selecting candidates in order to meet the requirements of Istituto Italiano di Tecnologia. Your data will be processed by Istituto Italiano di Tecnologia, with its headquarters in Genoa, Via Morego 30, acting as the Data Holder, using computer and paper-based means, observing the rules on the protection of personal data, including those relating to the security of data, and they will not be communicated to thirds. Please also note that, pursuant to art.7 of Legislative Decree 196/2003, you may exercise your rights at any time as a party concerned by contacting the Data Holder. Istituto Italiano di Tecnologia is an Equal Opportunity Employer that actively seeks diversity in the workforce.