

DOCTORAL POSITION

Adult neurogenesis

Regulation of adult neural stem cell activity by astrocytes

Starting date: August 2021, can be modified

Duration: 4-5 years

Institute: Center for Psychiatric Neurosciences, Department of Psychiatry, Lausanne University Hospital, Lausanne, Switzerland

Us:

Our research interest is the regulation of adult hippocampal neurogenesis by cellular biochemical and environmental factors. To this aim, we use various approaches, including electron microscopy and confocal microscopy, cell culture, mass spectrometry, inducible transgenic mice, viral-mediated gene transfer and behavior. We are a group of highly motivated scientists who value synergistic collaborations and science integrity. More info can be found here: <http://www.tonilab.org>

The project:

The aim of the project is to explore the regulation mechanism of adult neural stem cells by hippocampal astrocytes and to identify molecules released by astrocytes with a pro-neurogenic effect, as potential candidates for the treatment of age-related cognitive decline or depression. The project will involve biochemical, behavioral and cell culture approaches, in combination with chemogenetics approaches. This project is a follow up of Sultan et al Neuron 2015 (PMID 26606999). More info can also be found in the following review: Cassé et al. Frontiers 2018 (PMID 30538622).

You:

The candidate is a team player, has strong skills in verbal and written communication (English required, French is an asset), works independently, but is eager to collaborate with other members of the team to participate to different projects and learn new techniques. We will only consider applications from scientists (Master degree) with strong expertise in neuroscience. Preference will be given to candidates who have experience with histology (immunostaining, confocal microscopy) or behavioral tests. The student will be integrated into the Lemanic Neuroscience Doctoral School (<https://www.unil.ch/lm/en/home/menuinst/lm-doctoral-school.html>) in view of obtaining a PhD degree.

Application:

Please submit a CV, cover letter, and at least one reference to Nicolas Toni at the following email address: nicolas.toni@unil.ch.

Prof. Nicolas Toni, PhD
Center for Psychiatric Neurosciences, Department of Psychiatry
Lausanne University Hospital
Lausanne, Switzerland