





PhD position in mouse cortical development

A 3-year doctoral contract is available from <u>October 2016</u> in *Michèle Studer laboratory* to study genetic mechanisms involved in cortical cell-type specification, neural circuit assembly and plasticity of the developing and postnatal mouse cerebral cortex. The student will combine *in vivo* genetic gain- and loss-of-function techniques, including transgenic mice and *in utero* electroporation, with functional molecular, cellular and electrophysiological analysis.

Location

The group is located at the beautiful Valrose Campus in the heart of Nice and is part of the iBV, an international research centre that brings together high-profile teams with complementary areas of expertise and with a long-term interest in translating basic research into knowledge for the clinic. For more information, visit http://ibv.unice.fr/EN/institute/presentation.php

Qualification and experience

PhD candidates should be highly motivated, able to work in a multidisciplinary and international team and have previous experience in mouse handling, neurobiology or molecular biology. Working language in the group and Institute is mainly English and English proficiency is thus required.

Applications

Interested candidates should send their CV including motivation letter, desirably marks from their previous studies and contact information of at least two previous supervisors able to recommend their research ability, directly to Michele.STUDER@unice.fr

Related publications of the group:

- 1. *Touzot A. et al.* Molecular control of two novel migratory paths for CGE-derived interneurons in the developing mouse brain. *Development*, *2016*, *May* 15;143(10):1753-65.
- 2. *Harb K. et al.* Area-specific development of distinct neocortical neuron subclasses is regulated by postnatal epigenetic modifications. *eLife*, *2016*, *Jan 27;5*.
- 3. Alfano C. et al. Postmitotic control of sensory area specification during neocortical development. *Nature Communications*, 2014 Dec 5;5:5632.
- 4. Alfano C. et al. COUP-TFs: A long lasting experience in forebrain assembly. **Cell Mol Life Sci. 2014**, Jan;71(1):43-62. Review.
- 5. Chou S.J. et al. Geniculocortical thalamic axon input drives genetic distinctions that differentiate primary and higher order visual cortical areas. Science, 2013, Jun 7;340(6137):1239-42.
- 6. *Tomassy Srubek G. et al.* Area-specific temporal control of corticospinal motor neuron differentiation by COUP-TFI. *PNAS, 2010, 107(8): 3576-81.*
- 7. Armentano M. et al. COUP-TFI regulates the balance of cortical patterning between frontal/motor and sensory areas. **Nature Neuroscience**, **2007**, 10, 1277-1286.