



# UNIVERSITÀ DEGLI STUDI DI TORINO

## I@UNITO – Visiting Scientists

|                                     |  |                         |                       |                   |          |
|-------------------------------------|--|-------------------------|-----------------------|-------------------|----------|
| Scientific area                     | Scientific responsible   | Host Department         | Type of activity      | Start of mobility | Language |
| 05/F1                               | Giorgio R. Merlo   | Molecular Biotechnology | Research and Training | Febr. 2017        | English  |
| Type of fellowship                  | Senior (equal or more than 40 years old)<br>1 month  |                         |                       |                   |          |
| Title of the research project       | Examination of neurogenesis, cytoarchitecture and axonal connections in models of epilepsy and intellectual disability   |                         |                       |                   |          |
| Description of the research project | Several animal models have been obtained that reproduce aspects of the human epilepsy and intellectual disability conditions. The role of inhibitory neurons in these pathologies is increasingly being recognized. However, the detailed endophenotype, in terms of altered neurogenesis, axonal extension and synaptic networking are still poorly understood. We aim to take advantage of the established models to investigate these aspects.  |                         |                       |                   |          |
| Profile Description                 | The Visiting Professor should have an excellent publication record (at least 10) in developmental neurobiology and experimental neuroscience, experience in the mouse as experimental model, and ideally should successfully lead a team of young investigators  |                         |                       |                   |          |
| Research objectives                 | <p>We aim at conducting experiments and train young personnel on the following :</p> <ol style="list-style-type: none"> <li>1. cortical and hippocampal neurogenesis in normal and diseased brain,</li> <li>2. Accurate analyses of dendritogenesis and axonogenesis in excitatory and inhibitory neurons</li> <li>3. accurate axonal tracing to map medium- and long-distance connections</li> <li>4. Analyses of network activities.</li> </ol> <p>We also aim at having the Visiting Professor organize mini-lectures by our Laurea Specialistica and Doctoral students, for an interactive review of the research activity</p> |                         |                       |                   |          |
| Website and Contact                 | <a href="http://www.dmbhs.unito.it/do/home.pl/View?doc=Research_areas.html">http://www.dmbhs.unito.it/do/home.pl/View?doc=Research_areas.html</a><br>giorgioroberto.merlo@unito.it   |                         |                       |                   |          |