



Milan, July 6th, 2011

Object: Research fellowship available at the San Raffaele Scientific Institute, Milan

A research fellow position is open at the “Stem Cells and Neurogenesis” Unit directed by Dr. Vania Broccoli, Division of Neuroscience at the San Raffaele Scientific Institute.

The lab has developed new strategies for reprogramming dopaminergic neurons starting from mouse and human skin fibroblasts as well as other somatic cell types (*Caiazzo et al., Nature 2011*). This conversion is achieved by activating as few as three transcription factors leading to induced dopaminergic cells (iDA cells) which share the distinctive functions of their brain homolog cells showing pacemaking activity, controlled-release of dopamine and functional D2R autoreceptors.

Dopaminergic neurons are selectively lost during Parkinson’s disease and an enriched source of these neurons might be explored as a therapeutic opportunity for targeted transplantations.

This project aims to identify the transcriptional cascades in a genome-wide prospective activated in the fibroblasts by these factors. How gene expression profiling during reprogramming as well as the intermediate reprogramming states will be investigated with particular emphasis to changes in chromatin associated molecules.

This study will employ the generation of ChIP-Seq and microarray data and leads to understand the transcriptional landscape that control cell reprogramming.

The ideal candidate has a strong experience in molecular biology. A previous experience in genome-wide technologies is desired but not necessary.

The candidate will join a lab highly involved in exploring molecular mechanisms controlling cell reprogramming technologies as both cellular model for genetic diseases and in vitro system for neuronal differentiation. The lab has various active research lines and provides an inspiring and stimulating environment for young and motivated fellows.



The research fellowship is available immediately and is initially granted for one year, but can be extended up to three.

Salary and contract will be commensurate on the previous experience of the candidate.

Candidates interested in this position should send a CV and one letter of references to Dr. Vania Broccoli at the following address:

e-mail: broccoli.vania@hsr.it

Direct generation of functional dopaminergic neurons from mouse and human fibroblasts.

Caiazza M, Dell'anno MT, Dvoretzkova E, Lazarevic D, Taverna S, Leo D, Sotnikova TD, Menegon A, Roncaglia P, Colciago G, Russo G, Carninci P, Pezzoli G, Gainetdinov RR, Gustincich S, Dityatev A, Broccoli V.

Nature. 2011 Jul 3. doi: 10.1038/nature10284. [Epub ahead of print]