



INSTITUT PARIS DESCARTES
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Neuroscience Seminar Series

Friday, September 30th, 2016 at 11:30 am

Salle des Conférences (R229)
Centre Universitaire des Saints-Pères
45 rue des Saints-Pères, 75006 Paris

Paola Arlotta

*Professor, Stem Cell and Regenerative Biology,
Harvard University, Cambridge, MA, USA,*

Programming the Cerebral Cortex : from Cortical Development to Cortex in the Dish

The neocortex contains an unparalleled diversity of neuronal subtypes, each defined by distinct traits that are developmentally acquired under the control of several neuron subtype-specific and pan-neuronal genes. The regulatory logic that orchestrates the coordinated expression of these unique combinations of genes is not known for any class of cortical neurons. I will discuss recent work on the identification of novel transcriptional dynamics underlying developmental generation of excitatory pyramidal neuron diversity in the cerebral cortex, and highlight some new governing principles that regulate interactions among pyramidal neuron classes, with a particular emphasis on oligodendrocytes and regulation of myelination. Finally, I will discuss new work aimed at modeling development and disease of the human cerebral cortex, in 3D cerebral organoids generated from human pluripotent stem cells.

Those interested in meeting with the speaker please contact
maria-cecilia.angulo@parisdescartes.fr



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