



## Seminar

Friday October 12<sup>th</sup> 11.00 am

Faculté de Médecine Rockefeller, Lyon  
Salle Hermann\*

**Luisa Cochella**

Research Institute of Molecular Pathology (IMP), Vienna, Austria

# " Roles of miRNAs in animal development: lessons from *C.elegans* "

One of the main goals of developmental biology is to understand how the different cell types that constitute a multicellular organism are specified during its development. Luisa Cochella is a young PI (awarded for both ERC starting Grant and EMBO Young investigator program) who is currently exploring the different mechanisms of gene expression regulation that control this process. Her lab investigates how the transcriptional history of a cell influences its fate as well as how post-transcriptional mechanisms contribute to the diversification of the genetic programs that control cell fate. Luisa is more specifically interested in both neuronal and muscle differentiation.

If you wish to meet Luisa Cochella, please contact Florence Solari ([Florence.solari@univ-lyon1.fr](mailto:Florence.solari@univ-lyon1.fr)).

### Selected recent publications:

Alberti C., Manzenreither R., Sowemimo I., Burkard T., Wang J., Mahofsky K., Ameres S. and **Cochella L.** Cell-type specific sequencing of microRNAs from complex animal tissues. **Nature Methods**. 2018. 15(4):283-89

Alberti C. and **Cochella L.** A framework for understanding the roles of miRNAs in animal development. **Development**. 2017. 144(14):2548-59

Drexel T., Mahofsky K., Latham R., Zimmer M. and **Cochella L.** Neuron-type specific miRNA represses two broadly expressed genes to modulate an avoidance behavior in *C. elegans*. **Genes Dev**. 2016.30(18):2042-47.

**Cochella L.**<sup>1</sup>, Tursun B.<sup>1</sup>, Hsieh Y.W.<sup>1</sup>, Galindo S., Johnston R.J., Chuang C.F. and Hobert O. Two distinct types of neuronal asymmetries are controlled by the *C. elegans* Zn finger transcription factor *die-1*. **Genes Dev**. 2014. 28(1):34-43

**Cochella L.**\* and Hobert O.\* Embryonic priming of a miRNA locus predetermines postmitotic neuronal left/right asymmetry in *C. elegans*. **Cell**. 2012. 151(6): 1229-42 .

\* en haut des grandes marches extérieures, sur la droite