



Institut Pasteur

POST-DOCTORAL POSITION – Use of chemical tools to probe DNA and histone methylation

We are looking for a talented and curiosity-driven post-doc interested at the interface of chemistry and biology to join us in our new laboratory at the Institut Pasteur. Epigenetic modifications act together with transcription factors and other proteins to establish the expression profiles that are inherited from cell to cell, integrating various environmental stimuli. In cancers, alterations of the epigenetic landscape have been observed, but also in other pathologies. We have developed and characterized in cancer cells inhibitors of DNA methylation (*reviews: Pechalrieu et al. Biochem Pharmacol. 2017;129:1-13; Lopez et al. Adv Exp Med Biol. 2016; 945:431-473; Erdmann et al. J Med Chem. 2015 58(6):2569-83*), an epigenetic mark altered in cancers. We have recently started to apply our approaches to histone methylation (*Castillo-Aguilera et al. Biomolecules. 2017 Jan 5;7(1). pii: E3*). With our arrival at the Institut Pasteur we propose to implement the use of these chemical scalpels to dissect the complex cellular events that control the DNA and histone methylation profiles in cancer and in other pathologies. The successful candidate will join a team of chemists and biologists working together in synergy. She/he will manage two projects:

- the development of robust assays, in vitro and/or in cells, to screen an oriented chemical library designed and synthesized in house. A crosstalk with the chemists of the team is essential to the project;

- the use of the compounds as chemical tools to identify the molecular mechanism in the cells by chemical pulldown and “omic” analysis and by molecular and cellular biology techniques to follow the consequences of the drug treatments.

The candidate should have skills in enzymology, biochemistry, molecular and cellular biology. The candidate should be very open to cooperation with the other members of the lab and to collaborations with external partners.

The post-doctoral position at the Institut Pasteur, Paris, is for 12 months, renewable.

Starting dates are flexible, with a preference for beginning of April 2018.

Application, including a CV, two reference letters and detailed contacts, should be sent by email to paola.arimondo@etac.cnrs.fr.

Closing date: January, 5th 2018

Contact: Paola B. Arimondo
Laboratory: Epigenetic Chemical Biology
Department of Structural Biology and Chemistry
28 rue Dr Roux
75724 Paris cedex 15
FRANCE
phone +33 1 40 61 32 91
email : paola.arimondo@etac.cnrs.fr