

Two postdoctoral positions in epigenetics: Role of Lysine methylation in cancer and infection

Two positions are available to join the laboratory of Jonathan Weitzman at the centre for Epigenetics and Cell Fate at the Université Paris Diderot in Paris, France.

Our team studies the role of Lysine methylation in defining cellular identities. We are interested in deciphering the epigenetic changes that characterize tumor progression and how infectious agents hijack the genetic and epigenetic machinery of their host cells to change cellular states. We use integrated genomic and proteomic approaches to investigate the enzymes involved in the lysine methylome in cancer and infected cells and their contribution to the plasticity of cellular phenotypes. We are particularly interested in what host-parasite relationships can teach us about cellular identities and co-evolution of distant species:

- (i) A project funded for 3 years by the national cancer institute (INCA) to study histone methyl transferase contributions to liver cancer.
- (ii) A project funded for three years by the national research agency (ANR) to study protein methylation in host-parasite interactions.

The laboratory is located on the new Paris Rive Gauche university campus in the heart of the city. The campus houses a cluster of Life Sciences institutes and provides access to state-of-the-art core facilities including Imaging, Genomics and Proteomics platforms, as well as animal housing and core facilities in Epigenomics and Lentivirus production.

The successful candidate should be curious about phenotypic plasticity and interdisciplinary approaches to epigenetic regulation. We are looking for a team player with creativity, passion and determination.

send CV and contact details for 3 referees to
Professor Jonathan Weitzman
jonathan.weitzman@univ-paris-diderot.fr

Reference: PCP2015

Recent papers

Marsolier et al. *Theileria* parasites secrete a prolyl isomerase to maintain host leukocyte transformation. (2015) *Nature* 520:378

Weitzman & Weitzman. What's the damage? The impact of pathogens on pathways that maintain host genome integrity. (2014) *Cell Host & Microbe* 15:283

Marsolier et al. OncomiR addiction is generated by a feedback loop in *Theileria*-transformed leukocytes. (2013) *PLoS Pathogens* 9(4):e1003222

Cock-Rada et al. SMYD3 promotes cancer invasion by epigenetic upregulation of the metalloproteinase MMP-9. (2012) *Cancer Research* 72:810

