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One Genome Multiple Phenotypes: Polycomb at the Center

Friday February 10th 2017
2 pm

Amphithéâtre Biologie du Développement
Institut Curie, Paris

Hosted by CNRS UMR3215/INSERM U934
Edith Heard

If you would like to meet the speaker, please contact deborah.merlini@curie.fr

"Chaire Internationale de Recherche Blaise Pascal financée par la Région Ile-de-France, gérée par la Fondation de l’Ecole normale supérieure"
Abstract:

Epigenetics encompasses changes in gene expression profiles that occur without alterations in the genomic DNA sequence of a cell. This arises from the dynamic processes that structure regions of chromosomal DNA through a range of compaction in eukaryotes. The altered pattern of gene expression is pivotal to cellular differentiation and development and is inherited by daughter cells thereby maintaining the integrity, specifications, and functions for a given cell type. Aberrancies in this epigenetic process give rise to perturbations that are also inherited and disruptive to normal cellular properties. The histone proteins that package DNA into chromatin are subject to post-translational modifications generating different chromatin structures. The polycomb repressive complexes play pivotal functions in maintaining cellular identity through alteration of chromatin domains. Functions of these complexes will be discussed.