



MONSEF BENKIRANE

Institute of Human Genetics, Montpellier, France

CGAS-NUCLEOSOME INTERACTOME: BRIDGING EPIGENETICS, GENOME ORGANIZATION AND INNATE IMMUNITY

1.JULY 2025 - 11 AM - LECTURE HALL

Major discoveries in recent years have highlighted the physical and functional interaction between two cellular pathways that were thought to be independent, the DNA repair and the innate immune pathways. On one hand, key DNA repair factors have been shown to act as DNA sensors and or regulators of DNA sensing and on the other, the major DNA sensor cGAS has been reported to play role in DNA repair. More recently, it has been shown that the majority of cGAS is tightly tethered to chromatin where it is maintained in inactive form. This discovery raises important questions about cGAS nuclear function and the safeguard mechanism of its inactivation and regulation. Towards this goal, we immunopurified cGAS bound to chromatin and its associated partners which were subsequently identified by mass spectrometry and confirmed by immunoprecipitation. We will discuss how the newly identified cGAS interactants regulates cGAS tethering to chromatin and its function.

Invited by: Saadi Khochbin

Twitter: IAB_Officiel
Website: https://iab-grenoble.fr/









