

Dipartimento di Biologia Cellulare, Computazionale e Integrata



Organizers:

Marta Biagioli Fulvio Chiacchiera

Epigenetics Mondays Seminars

Every Monday from May 9th till May 30th

May 9thth @ 2:30PM Room A108

Kyung Min Noh - EMBL (Germany)

Molecular function of chromatin regulators linked to neurodevelopmental disorders

Chromatin, the devoted association of histone proteins and genomic DNA, exists as the physiological form of our genome and the substrate for chromatin regulators that orchestrate gene expression. Recent advances in genome sequencing have made it clear that mutated chromatin and chromatin regulators increase susceptibility to human diseases. Given that it is often unknown how such mutations lead to abnormal function within the cells, our research is focused on defining the molecular mechanisms that link genetic mutations encoded in chromatin regulators to the widespread changes in gene expression and neurodevelopmental defects. In my talk, I will introduce our past and current research investigating the functional roles of chromatin and chromatin regulators in genome regulation programs by applying multi-omics. Defining the epigenetic landscape, both in normal and abnormal brain cells will help provide novel targets for therapeutic intervention for cognitive and neurodevelopmental disorders.