

XIV Jornada de Cromatina i Epigenètica

Organitzada per la Secció de Cromatina i Epigenètica de la Societat Catalana de Biologia (SCB)



Enabling Epigenetics Research

XIV Annual Chromatin and Epigenetics symposium

Organized by the Chromatin and Epigenetics section of the Catalan Society of Biology (SCB) —Albert Jordan—

May 10, 2024

9:00 Registration

9:20 Opening

Session I. Chair: Sergi Aranda (CRG)

9:30-9:50 Sergi Cuartero (IJC) Transcriptional regulation by mutant CEBPA in AML

9:50-10:10 15min +5 Salvador Aznar (IRB) Epigenetic memory of fatty acid metabolism in disease and cancer

10:10-10:30 15min +5 Josefa Gonzalez (IBE, UPF-CSIC) The epigenetics effects of transposable elements are context dependent and not restricted to gene silencing

10:30-10:50 Joan-Ramon Daban (UAB) Soft-matter properties of chromosomes and possible functional implications

10:50-11:00 Short talk 1 Silvia Beato (ICM-CSIC) Epigenetic and transcriptomic changes associated with artificial induction of triploidy in the European sea bass (Dicentrarchus labrax)

11:00-11:40 Coffee break and poster session

Session II. Chair: Sara Sánchez (SJD)

11:40-12:00 Jordi Bernués (IBMB-CSIC) Linker histone H1 regulates homeostasis of heterochromatin associated cRNAs

12:00-12:20 15min +5 Montse Corominas (UB) Integrative analysis of the chromatin regulatory landscape during early liver regeneration

12:20-12:40 Francesc Piferrer (ICM-CSIC)

15min +5

8min +2

15min +5

15min +5

15min +5

Environmentally-induced DNA methylation changes in fish under a global warming scenario.

12:40-12:50 Short talk 2 8min +2 Silvia González (CRG) The dynamic establishment of enhancer function **12:50-13:00** Short talk 3 8min +2 **Caroline Mauvezin** (UB) The toroidal nucleus: a novel indicator of chromosomal instability in cancer 13:00-13:10 Short talk 4 8min +2 Marie Christou-kent (CRG) CEBPA phase separation links transcriptional activity and 3D chromatin hubs 13:10-13:20 Short talk 5 8min +2 Meritxell Novillo (CNAG) Genomic Studies in Colorectal Cancer Progression 13:20-13:30 Sponsor talk 8min +2 Chamseddine Kifagi (Active Motif) A Universal Spike-In Normalization Strategy for CUT&RUN, CUT&Tag, and ATAC-Seq

13:30-14:30 Lunch break, coffee and poster session

Session III. Chair: José Luís Sardina (IJC)	
14:30-14:50 Lorenzo Pascuali (UPF) Beta cell regulatory responses to lymphocytes activation and T1D	15min +5
14:50-15:10 María José Barrero (ISCIII) Ehmt2 loss-of-function alterations cause a kleefstra-like sindrome.	15min +5
15:10-15:30 Ángel Barco (IN-UMH-CSIC) Activity-dependent shuffling of KAT3 co-activators in hippocampal neuro	15min +5
15:30-15:50 Gregoire Stik (IJC)	15min +5

Phase separation as a driver of chromatin organisation and leukemogenicity.

15:50-16:20 Break and poster session

Session IV. Chair: Maria José Barrero (ISCIII)

16:20-16:40 Alicia Roque (UAB) Intrinsic disorder in the regulation of histone H1 protein levels	15min +5
16:40-17:00 Tian Tian (VHIO) Towards novel therapeutic strategies for NUT carcinoma.	15min +5
17:00-17:20 Joaquim Roca (IBMB-CSIC) Nucleosomal DNA has topological memory	15min +5
17:20-17:40 Luciano di Croce (CRG) Dissecting dynamics of chromatin functions in cell differentiation and ca	15min +5 ncer

17:45 Closing and beers

POSTERS

1-Alba Irisarri (UB) @ Griñán Lab

Neuroprotective effects of FTO inhibition in high-fat diet-fed SAMP8 mice

2-Marta Ribalta (UB) @ Griñán Lab

Effects of G9a inhibition and cannabinoid receptor activation in Alzheimer's disease through a pharmacological approach

3-Anna Guitart (IJC) @ Vaquero Lab

SIRT7 loss impairs epigenetic control of spermatogenesis and leads to premature male reproductive aging

4-Nikolai Bykov (CNAG) @ Martí-Renom Lab TAD boundaries in Drosophila embryogenesis have distinctive transcriptional dynamics

5-Eric Julià (IJC) @ Cuartero Lab Investigating AML Mutations and their Impact on 3D Chromatin Organization

6-Raquel Plaza (IBMB-CSIC) @ Martínez-Balbas Lab

PHF2-mediated H3K9me balance orchestrates heterochromatin stability and progenitor proliferation in early neurogenesis

7-Marta Artés (IBMB-CSIC) @ Martínez-Balbas Lab

Function of the histone demethylase PHF8 in neural progenitor cells

8-Jordi López (UAB) @ Roque Lab

Histone H1 profiling by quantitative proteomics.

9-Alejandro Pérez (UB) @ Agell Lab

Effects of replication stress on DNA replication dynamics and chromatin accessibility in colorectal cancer cells

10-Palmira Llorens (UB) @ Corominas Lab

Genome architecture during wing disc regeneration undergoes local changes between proximal chromatin interactions

11-Carini Picardi (IJC) @ Cuartero Lab

Understanding the role of GATA1 and cohesin mutations in myeloid leukemia of Down syndrome

12-Oliver Meers (IJC) @ Buschbeck Lab

The Unstructured Linker of macroH2A is a Previously Overlooked Functional Domain Involved in Nuclear Conformation, Chromatin Dynamics and Gene Expression

Secretaries of SCB:

<u>Mariàngels Gallego</u> and <u>Paqui Lorite</u> Societat Catalana de Biologia C/ Maria Aurèlia Capmany, 14-16, 08001 Barcelona. Tel. 933 248 584; E-mail: <u>scb@iec.cat</u>

Organized by:

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