



**Institut
d'Estudis
Catalans**



**Societat Catalana
de BIOLOGIA**

XV Jornada de Cromatina i Epigenètica

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



XV Annual Chromatin and Epigenetics symposium

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

May 8, 2025

PROGRAM

9:00 Registration

9:20 Opening

Session I. Chairs: *Alfred Cortès (ISGlobal)* & *Carles Ciudad (UB)*

9:30-9:50 **15min +5**

Sara Sánchez (FSJD)

An Epigenetic Approach to the Treatment of Ewing Sarcoma

9:50-10:10 **15min +5**

Guillermo Vicent (IBMB-CSIC)

Unraveling the Role of YAP1 in Modulating Hormonal Response in Breast Cancer Cells

10:10-10:30 **15min +5**

Rafael Oliva (IDIBAPS-UB)

Nuclear proteome of the sperm cell, chromatin structure and its contribution to the embryo

10:30-10:50 **15min +5**

José Antonio Seoane (VHIO)

Leveraging DNA methylation as a proxy of exposome to uncover causes of early-onset colorectal cancer

10:50-11:00 Short talk 1 **8min +2**

Aleksey Lazarenkov (IJC, @José L. Sardina lab)

Unveiling the Role of TET2 in Chromatin Architecture and Gene Regulation During Myeloid Commitment and Leukemia

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

Session II. Chairs: *Marcos F. Pérez* (IBMB-CSIC) & *José L. Sardina* (IJC)

11:40-12:00

15min +5

Ferran Azorin (IBMB-CSIC, IRB)

Chromatin-nuclear envelope interactions

12:00-12:20

15min +5

Esteban Ballestar (IJC)

Exploring Epigenetic Mechanisms Shaping Myeloid Cell Function in the Tumor Microenvironment

12:20-12:40

15min +5

Albert Jordan (IBMB-CSIC)

Specificity of histone H1 variants in the organization and control of the genome

12:40-12:50 Short talk 2

8min +2

Oliver Meers (IJC, @Marcus Buschbeck lab)

MacroH2A Mediates Genome Regulatory Functions Through Its Basic, Unstructured Linker Domain

12:50-13:00 Short talk 3

8min +2

Paula Boldo (IR Sant Pau, @Israel Fernández-Cadenas lab)

Sex-Stratified X-Chromosome Variants In Ischemic Stroke: Linking Genetic Risk To Chromatin State

13:00-13:10 Short talk 4

8min +2

Leone Albinati (CRG, @Renée Beekman lab)

Charting the genome activation history of tumor-related regulatory elements through DNA methylation studies

13:10-13:20 Short talk 5

8min +2

Cristina Moreta (UIC, @Roni Wright lab)

Harnessing Chromatin Control: Unraveling PARP1's Super-enhancer Dynamics in Breast Cancer

13:20-13:30 *Sponsor talk, webinar*

8min +2

Stefan Dillinger (Active Motif)

Genome-Wide Profiling of Histone Marks: Higher Throughput and Improved Quality

13:30-15:00 *Lunch break, coffee and poster session*

Session III. Chairs: *Jordi Bernués* (IBMB-CSIC) & - (-)

15:00-15:20

15min +5

Biola Javierre (IJC)

The 3D epigenome roadmap of human B cell differentiation sheds light on the mechanistic foundations of humoral immunity and B cell cancer susceptibility

15:20-15:40

15min +5

Jorge Ferrer (CRG)

Integration of transcription and splicing networks underlying diabetes mellitus

15:40-16:00

15min +5

Josep Jiménez (FSJD)

Integrative Epigenome and Chromatin Analyses Identifies SPATC1L as a Causal Locus for Childhood Obesity Development

16:00-16:20

15min +5

Aurora Ruíz (UAB)

Exploring the dynamics of chromatin folding across time-scales and cell types

16:20-16:40

15min +5

Tian Tian (VHIO)

Leveraging Patient-Derived Models for Biliary Tract Cancer Research

16:40-17:00

15min +5

Marc A. Martí-Renom (CNAG-CRG)

The discovery of fossil chromosomes

17:00 *Closing and beers*

POSTERS

1- Alexander Barclay (CNAG/CRG) @ Renom Lab
Structure-Based Genome Engineering

2- Alvaro Alcalde (IJC) @ Javierre Lab
Unveiling the Role of Polycomb in B Cell Differentiation: Insights from a PRC1-Deficient Mouse Model

3- Andrea Nieto (IJC) @ Javierre Lab
Integrative Multi-Omic Analysis Profiles Gene Regulatory Network Dynamism at Single-Cell Resolution Across Human B-cell Differentiation and its Implications for B-cell Malignancies

4- Binman Liu & Rafia U Saman (UAB) @ Moreno Lab
Evolutionary conservation and diversification of epigenetic memory of shade response in Brassicaceae

5- Claudia M Miralles (UIC) @ Wright Lab
In vivo CAM assays uncover a context-dependent tumor-suppressive function of GROa in triple-negative breast cancer.

6- Evangelos Manousakis (UIC) @ Wright Lab
CDKN1A/p21 chromatin binding alters breast cancer stem cell survival

7- Jonathan Blickenberger (IJC) @ Buschbeck Lab
Elucidating the role of the histone variant macroH2A2 in Ewing sarcoma

8- Laia Marine (IR Sant Pau) @ Gallego Lab
Epigenome-Wide Association Study Of Post-Stroke Respiratory Infections: Linking Epigenetics And Clinical Outcomes

9- Lucía Fanlo (IJC) @ Javierre Lab
p53 rapidly restructures 3D chromatin organization to trigger a transcriptional response

10- Luis Paños (IJC) @ Vaquero Lab
Role of SIRT7-mediated control of the One Carbon metabolism epigenetic regulation of aging

11- Marta López (IJC) @ Stik Lab
The role of 3D genome organization in E2A-PBX1 driven B-ALL

12- Paula López (IJC) @ Javierre Lab
The 3D epigenome roadmap of human B-cell differentiation sheds light on the mechanistic foundations of humoral immunity and B-cell cancer susceptibility

13- Paula Roquero (IJC) @ Buschbeck Lab
Loss-of-function screen identifies novel Cytarabine-sensitizing targets in Acute Myeloid Leukaemia (AML)

14- Yolanda Andres (IBMB-CSIC) @ Hernando Lab

Using CRISPR barcoding as a molecular clock to capture dynamic processes at single-cell resolution

15- Carla El Khouri (IBMB-CSIC) @ Hernando Lab

Novel approach to explore DNA damage responses throughout neurodevelopment

16- Jordi López (UAB) @ Roque Lab

Identification of proteins associated with specific genomic regions by targeted chromatin proteomics

17- María J Barrero (IIER-ISCI) @ Piferrer Lab

Modeling an EHMT2-Associated Neurodevelopmental Disorder with Brain Organoids

18- Gabriel L Ecker-Eckhofen (ICM-CSIC) @ Piferrer Lab

Shared Methylation Regions (SMRs): a New Method in Comparative Epigenetics Used to Create a Multispecies Piscine Epigenetic Clock

Secretaries of SCB:

Mariàngels Gallego and Paqui Lorite

Societat Catalana de Biologia

C/ Maria Aurèlia Capmany, 14-16, 08001 Barcelona.

Tel. 933 248 584; E-mail: scb@iec.cat

Organized by:

Albert Jordan Vallès

Coordinator of the Chromatin and Epigenetics section of the SCB

Dept. Molecular Genomics, Institut de Biologia Molecular de Barcelona (IBMB-CSIC),
Parc Científic de Barcelona

A/e: albert.jordan@ibmb.csic.es

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