



Institut
d'Estudis
Catalans



Societat Catalana
de **BIOLOGIA**

XII Jornada de Cromatina i Epigenètica

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

amb el Barcelona Chromatin Club (BCC)



XII Annual Chromatin and Epigenetics symposium

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

—Albert Jordan—

May 13, 2022

We recommend the use of mask inside the conference room to prevent Covid

PROGRAM

9:00 Registration

9:20 Opening

Session I. Chair: David Monk (Univ. East Anglia)

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

Manel Esteller (IJC)

Epigenetics and epitranscriptomics in cancer

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

Aurora Ruíz-Herrero (UAB)

Evolving chromatin - rewiring genomic interactions

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

Sara Sánchez (FSJD)

Chromatin remodeling in Ewing Sarcoma

10:30-10:40 Short talk 1 **8min +2**

Jia Liang Sun Wang (IRB)

The autophagic protein TP53INP2 goes to chromatin

10:40-10:50 Short talk 2 **8min +2**

Mireia Ramos-Rodríguez (UPF)

Noncoding regulatory functions in β -cell derived neuroendocrine tumors

10:50-11:00 Short talk 3 **8min +2**

Anna Oncins Suñol (CRG)

Mantle Cell Lymphoma-associated translocations are related to global genome topology disruption

11:00-11:30 Coffee break and poster session

Session II. Chair: Tanya Vavouri (IJC)

11:30-11:50 **15min +5**

Bernhard Payer (CRG)

A controlled sequence of X-chromosome inactivation and reactivation defines meiotic potential of female mouse in vitro germ cells

11:50-12:10 **15min +5**

Guillermo Vicent (IBMB-CSIC)

Role of extracellular matrix and cell-cell contacts on genome structure and function in breast cancer cells

12:10-12:30 **15min +5**

Ferran Azorin (IBMB-CSIC, IRB)

Linker histones function in *Drosophila* embryogenesis

12:30-12:40 Short talk 4 **8min +2**

Miriam Acosta (UB)

Association of epigenetic markers in peripheral blood and suicidal attempts in bipolar disorder

12:40-12:50 Short talk 5 **8min +2**

Mariona Latorre (FIDMAG)

FKBP5 methylation patterns: cortical thickness and clinical correlates in schizophrenia

12:50-13:00 Short talk 6 **8min +2**

Mireia Labrador Isern (IRB)

Deciphering correlations between DNA methylation, nucleosome positioning, gene expression and 3D chromatin structure using *Saccharomyces cerevisiae*

13:00-13:10 Short talk 7 **8min +2**

David Corujo García (IJC)

MacroH2A1.2 and macroH2A2 modulate the response of cancer cells to innate immune signals involving changes in chromatin architecture and enhancer activation

13:10-14:30 *Lunch break and poster session*

Session III. Chair: Bernhard Payer (CRG)

14:30-14:50 **15min +5**

Albert Jordan (IBMB-CSIC)

Human histone H1 variants distribution and influence on 3D genome conformation

14:50-15:10 **15min +5**

Direna Alonso Curbelo (IRB)

Epigenetic control of tissue plasticity in pancreatic regeneration and tumorigenesis

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

Cristina Moreta (UB)

A chromatin-based loss-of-function approach identified novel targets to overcome chemoresistance in colorectal cancer

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

Josep Jimenez (UB)

Epigenetics in pediatric obesity: *The Snowball Paradigm*

15:50-16:20 *Coffee break and poster session*

Session IV. Chair: *Roni Wright* (UIC)

16:20-16:40 **15min +5**

Jorge Ferrer (CRG)

Modeling noncoding genome defects underlying diabetes

16:40-17:00 **15min +5**

Biola Javierre (IJC)

liChi-C: a new low input method to map and robustly compare promoter interactomes at high resolution

17:00-17:20 **15min +5**

Rafael Oliva (UB)

Sperm chromatin composition and structure: functional implications

17:20-17:40 **15min +5**

José Antonio Seoane (VHIO)

Subtype specific epigenetic programs in breast cancer

17:40-17:50 Short talk 8 **8min +2**

Claudia Buhigas (Univ. East Anglia)

Single-cell multi-omic analysis reveals defective genome activation and epigenetic reprogramming associated with human pre-implantation embryo arrest

18:00 *Closing and beers*

POSTERS

1-Lucía Álvarez González (IBB-UAB)

Evolutionary implications of 3D chromatin remodeling in the germ line

2-María J Barrero (ISCIII)

Transcriptional profiles reveal sources of cellular stress in patients with undiagnosed rare diseases

3-Mercedes Barrero (CRG)

A genome-wide crispr screen to identify novel pathways involved in reprogramming and X-chromosome reactivation

4-Silvia Beato (ICM-CSIC)

Reprogramming of epigenetic marks during early development across vertebrates

5-Maria Cadefau (IJC)

The role of *C/EBPβ* isoforms in acute myeloid leukemia

6-Louise Chappell-Maor (Univ. East Anglia)

The non-bisulphite conversion-based method, scEM-T-seq for dual single-cell methylome and transcriptome profiling

7-Dagne Daskeviciute (Univ. East Anglia)

PIK3R1 and *GOS2* are human placenta-specific imprinted genes associated with germline inherited maternal DNA methylation

8-Anna Guixeras (UB)

Planarian stem cell differentiation requires the acetyltransferase *Smed-cbp-3*

9-Blanca Lázaro (UIC)

Polyphosphate degradation by *NUDT3-Zn²⁺* regulates the architecture of nuclear speckles in human cells

10-Palmira Llorens (UB)

The landscape of accessible chromatin in mouse liver regeneration

11-Zina Lüschen (ICM-CSIC)

Immune stimulation on primary ovary cell culture of zebrafish

12-Oliver Meers (IJC)

Investigating the function of the linker domain of macroH2A in chromatin regulation with novel genome-editing approaches

13-Beatriz Pérez (UPF)

β cells regulatory functions and Type 1 Diabetes

14-Carini Picardi (IJC)

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

15-Mónica Salinas (IBMB-CSIC)

Differential genomic distribution of human histone H1 variants

16-María Sánchez Jiménez (FSJD)

Aurora Kinase B inhibitors: a search for new combinatorial strategies to target Ewing Sarcoma

17-Marc Subirana (UPF)

Profiling the insulinoma genetic landscape

18-Laureano Tomás (IJC)

Low input promoter capture Hi-C: a method to decipher the molecular mechanisms underlying non-coding alterations

19-Gemma Valcarcel (IJC)

Epigenome editing uncovers methylation-expression causality in leukemic cell fate model

20-Laia Marin (UAB)

RAD21L depletion alters the 3D genome architecture in the male germ line

21-Marina Ruiz Romero (CRG)

scFLEA-ChIP: deciphering epigenetic signatures at single cell level

Secretaries of SCB:

Mariàngels Gallego and Maite Sánchez

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