

BARCELONA CONFERENCES ON EPIGENETICS AND CANCER

CHALLENGES, OPPORTUNITIES AND PERSPECTIVES

November, 21 and 22, 2013 CosmoCaixa Barcelona

Thursday, 21 November

9.15 Welcome

9.30 – 10.50 Session 1: MOLECULAR EPIGENETICS

Chair: **Miguel Beato**, Centre for Genomic Regulation (CRG), Spain

9.30 **Thomas Jenuwein**, Max-Planck-Institute of Immunology and Epigenetics, Germany
Interstitial Heterochromatin in the Mouse Embryonic Stem Cell Epigenome is Defined By Suv39h-Dependent H3K9me3

9.55 **Olivier Cuvier**, Laboratoire de Biologie Moléculaire Eucaryote (LBME) - CNRS/ Univ. of Toulouse, France
Epigenetic Regulation of Gene Expression through Key Players of Nucleosome Dynamics

10.10 **Sandra Peiró**, Hospital del Mar Medical Research Institute (IMIM), Spain
Regulation of Heterochromatin Transcription by Snail1/ LOXL2 during Epithelial to Mesenchymal Transition

10.25 **Kristian Helin**, Biotech research and Innovation Centre, Denmark
Mechanisms Regulating Polycomb Group Proteins Recruitment to Target Genes

11.00 Coffee

11.30 – 12.50 Session 2: EPIGENETIC MECHANISMS OF DIFFERENTIATION & DEVELOPMENT

Chair: **Albert Jordan**, Institute of Molecular Biology Institute of Barcelona (IBMB-CSIC), Spain

11:30 **Raffaella Santoro**, University of Zurich, Switzerland
The Epigenetics of the Nucleolus

11:55 **Antonis Kirmizis**, Department of Biological Sciences, University of Cyprus, Cyprus
The Histone N-Terminal Acetyltransferase Nat4 Controls Ribosomal DNA Expression and Cell Growth

12:10 **Jeffrey Dilworth**, Ottawa Hospital Research Institute, Canada
Trr-like Trithorax Complex is Critically Required for Satellite Cells Mediated Muscle Regeneration

12:25 **Marcus Buschbeck**, Institute of Predictive and Personalized Medicine of Cancer (IMPPC), Spain
A Non-Canonical Function for a Polycomb Protein in Embryonic Stem Cells

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Thursday, 21 November

13.00 – 14.30 Lunch and posters

14.30 - 15.50 **Session 3: ABERRANT PATTERNS OF CHROMATIN
MODIFICATION IN CANCER**

Chair: **Ferran Azorín**, Institute for Research in Biomedicine (IRB Barcelona), Spain

- 14:30** **Andrew Feinberg**, Johns Hopkins University, USA
Large Scale Epigenomic Changes in Human Cancer
- 14:55** **Angela Risch**, DKFZ German Cancer Research Center
From Genome-Wide Analyses to Epigenetic Mechanisms in Lung Carcinogenesis
- 15:10** **Angelika Merkel**, National Center for Genomic Analysis (CNAG), Barcelona, Spain
Non CpG Methylation During Normal Bcell Differentiation
- 15:25** **Manuel Perucho**, Institute of Predictive and Personalized Medicine of Cancer (IMPPC), Spain
DNA Demethylation in Colon Cancer

16.00 Coffee

16.30 - 18.20 **Session 4: STEM CELLS & CANCER**

Chair: **Manuel Perucho**, Institute of Predictive and Personalized Medicine of Cancer (IMPPC), Spain

- 16:30** **Marjorie Brand**, Sprott Center for Stem Cell Research, Ottawa Hospital Research Institute, Canada
UTX is Required for TAL1 Mediated Leukemogenesis in TALL
- 16:45** **Luciano di Croce**, Center for Genomic Regulation (CRG), Spain
Dissecting the Role of Polycomb in Embryonic Stem Cells and Cancer
- 17:10** **Rudolf Jaenisch** (EMBOKeynote lecture), Whitehead Institute, MIT, USA
iPS Cell Technology and Disease Research: Issues to be Resolved

18.20 – 20.00 Poster session, Networking

21.00 **Speakers Dinner**

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Friday, 22 November

9.30 – 10.50 Session 5: EPIGENOMICS

Chair: **Marcus Buschbeck**, Institute of Predictive and Personalized Medicine of Cancer (IMPPC), Spain

- 9:30 **Bing Ren**, University of California, San Diego, USA
High Resolution Analysis of Three-Dimensional Genome Architecture in Human Cells
- 9:55 **Henk Stunnenberg**, Radboud University, Netherlands
The Epigenome of Groundstate Mouse Embryonic Stem Cells
- 10:20 **Marc Marti-Renom**, National Center for Genomic Analysis (CNAG), Barcelona, Spain
Functional role of Topologically Associating Domains in the Dynamic Response of Breast Cancer Cells to Hormone
- 10:35 **Amos Tanay** (EMBO Young Investigator Lecture) Weizmann Institute of Science, Israel
Single Cell Approaches to Cell State and Epigenetic Memory

11.00 – 11.30 Coffee

11.30 – 13.10 Session 6: EPIGENETIC MECHANISMS AS POINT OF THERAPEUTIC INTERVENTION

Chair: **Manel Esteller**, Epigenetic and Cancer Program (PEBC-IDIBELL), Spain

- 11:30 **Tony Kouzarides**, Gurdon Institute Cambridge, UK
Epigenetic Pathways in Transcription and Cancer
- 11:55 **Manel Esteller**, Bellvitge Biomedical Research Institute (IDIBELL), Barcelona, Spain
Cancer Epigenetics_ From Knowledge to Applications
- 12:20 **Manfred Jung**, Institute of Pharmaceutical Sciences and Freiburg Institute of Advanced Studies (FRIAS), Universität Freiburg, Germany
Exploiting the HDAC Subtype Sensitivity of S. Mansoni for Epigenetic Antiparasite Drugs
- 12:35 **Carlo M. Croce**, Ohio State University, USA
Causes and Consequences of MicroRNA Dysregulation in Cancer

13:10 **Closing remarks and end of scientific program**

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