

# KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

## Cancer Epigenetics: New Mechanisms, New Therapies (B4)

February 10-14, 2018 • Beaver Run Resort • Breckenridge, Colorado, USA

Scientific Organizers: François Fuks and Anne Brunet

Sponsored by Cell Research, Incyte Corporation, Novartis Institutes for BioMedical Research and Pfizer Inc.

Abstract & Scholarship Deadline: October 10, 2017 / Abstract Deadline: November 8, 2017 / Discounted Registration Deadline: December 12, 2017

### SATURDAY, FEBRUARY 10

#### Arrival and Registration

### SUNDAY, FEBRUARY 11

#### Welcome and Keynote Address

**Tony Kouzarides**, University of Cambridge, UK  
*Epigenetic Modifications in Transcription and Cancer*

#### Epigenetic Mechanisms and Cancer

**Shelley L. Berger**, University of Pennsylvania, USA  
*Epigenetic Regulation of Aging and Cancer*

**Ali Shilatifard**, Northwestern University, USA  
*Principles of Epigenetics and Chromatin in Development and Human Disease*

**Robert E. Kingston**, Massachusetts General Hospital, USA  
*Chromatin Compaction and Epigenetic Memory*

#### Short Talk(s) Chosen from Abstracts

#### Chromatin Dysregulations in Cancer

**Danny F. Reinberg**, HHMI/New York University, USA  
*Activating and Repressing Transcription to Maintain Cellular Identity*

**Luciano Di Croce**, Centre for Genomic Regulation, Spain  
*Unveiling Polycomb Functions in Stem Cells and Cancer*

**Cigall Kadoch**, Dana-Farber Cancer Institute, Harvard Medical School, USA

*BAF Complex Structure and Function in Human Cancer*

#### Short Talk Chosen from Abstracts

#### Poster Session 1

### MONDAY, FEBRUARY 12

#### Emergence of Epitranscriptomics

**François Fuks**, Université Libre De Bruxelles, Belgium  
*Transcriptome-Wide Distribution and Function of Novel RNA Modifications*

**Chuan He**, University of Chicago, USA  
*Reversible RNA Methylation in Gene Expression Regulation*

**Gideon Rechavi**, Tel Aviv University, Israel  
*Cancer Epitranscriptomics*

**Michaela Frye**, University of Cambridge, UK  
*RNA Post-Transcriptional m5C-Methylation in Stem Cells and Cancer*

#### Short Talk(s) Chosen from Abstracts

#### Chromatin Assembly, Stem Cells and Aging

**Howard Y. Chang**, Stanford University, USA  
*From Epigenetics to Stem Cells and Cancer*

**Geneviève Almouzni**, Centre National de la Recherche Scientifique, France

*Chromatin Determinants of Centromeric Identity and their Deregulation in Cancer*

**Anne Brunet**, Stanford University, USA  
*Epigenetic Regulation of Aging*

#### Short Talk Chosen from Abstracts

#### Poster Session 2

### TUESDAY, FEBRUARY 13

#### DNA (de)Methylation Dynamics and Cancer

**Stephen B. Baylin**, Johns Hopkins University School of Medicine, USA

*DNA Methylation in Stem Cell and Cancer*

**Peter A. Jones**, Van Andel Research Institute, USA

*How DNA Methylation Shapes the Epigenome*

**Salvador Aznar Benitah**, ICREA and Institute for Research in Biomedicine, Spain

*DNA Methyltransferases in Epidermal Stem Cell Homeostasis and Cancer*

**Karen Adelman**, Harvard Medical School, USA

*Transcription Elongation by RNA Polymerase II and Cancer*

#### Short Talk(s) Chosen from Abstracts

#### Connecting Non-Coding RNAs and Cancer

##### Speaker to be Announced

**Chris Marine**, VIB, Belgium  
*Cancer Cell Addiction to lncRNAs*

**Robert A. Martienssen**, Cold Spring Harbor Laboratory, USA  
*Replication-Coupled Silencing and Spreading with RNAi*

#### Short Talk Chosen from Abstracts

#### Poster Session 3

### WEDNESDAY, FEBRUARY 14

#### Novel Therapeutic Discoveries in Epigenetics I

**Mark A. Dawson**, Peter MacCallum Cancer Centre, Australia  
*Targeting Epigenetic Regulators in Haematological Malignancies*

**Kornelia Polyak**, Dana-Farber Cancer Institute, Harvard Medical School, USA

*Epigenetic Targets in Breast Cancer*

**Robert MacLeod**, Ionis Pharmaceuticals, Inc., USA  
*Antisense Oligonucleotide-Based Therapeutics for Cancer*

**Ronan C. O'Hagan**, Merck Research Laboratories, USA  
*Epigenetics and Immune Modulation in Cancer Therapy*

#### Short Talk(s) Chosen from Abstracts

#### Workshop

##### Short Talks Chosen from Abstracts

#### Novel Therapeutic Discoveries in Epigenetics II

**Electron Kebebew**, National Cancer Institute, USA  
*Targeting the Epigenome in Endocrine Cancers*

**Rab K. Prinjha**, GlaxoSmithKline, UK  
*Epigenetic Targets for the Treatment of Human Diseases*

**James E. Bradner**, Novartis Institutes for BioMedical Research, USA  
*Targeted Degradation of Chromatin-Associated Transcription Factors*

#### Meeting Wrap-Up: Outcomes and Future Directions (Organizers)

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**THURSDAY, FEBRUARY 15**

**Departure**