

# KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

## Non-Coding RNAs: Biology and Applications - RESCHEDULING TO VIRTUAL (D2)

May 10-14, 2021 • Renaissance Palm Springs Hotel • Palm Springs, CA, USA

Scientific Organizers: David L. Spector, Ling-Ling Chen and Anna Marie Pyle

Sponsored by Cell Research and Ionis Pharmaceuticals, Inc.

Scholarship Deadline: January 19, 2021 / Abstract Deadline: February 10, 2021 / Discounted Registration Deadline: March 10, 2021

### MONDAY, MAY 10

#### Arrival and Registration

### TUESDAY, MAY 11

#### Welcome and Keynote Address

**Edith Heard**, European Molecular Biology Laboratory, Germany  
*X-Inactivation in Mammals*

#### Regulation of Long Noncoding RNA in Nuclear Condensates

**Tetsuro Hirose**, Osaka University, Japan  
*The Elements and Machinery of Architectural Long Noncoding RNAs*

**Prasanth V. Kannanganattu**, University of Illinois, USA  
*Repeat-Containing Noncoding RNAs in the Nucleolus*

**Ling-Ling Chen**, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, China  
*Linking Long Noncoding RNA Processing and Function*

Short Talk(s) Chosen from Abstracts

#### Workshop 1: New Technologies in RNA Biology

Short Talks Chosen from Abstracts

#### Noncoding RNA in Therapeutics

**David L. Spector**, Cold Spring Harbor Laboratory, USA  
*Targeting Long Noncoding RNAs to Impact Breast Cancer Progression*

**Arul M. Chinnaiyan**, University of Michigan, USA  
*Clinical Potential Long Noncoding RNAs in Prostate Cancer*

**Sarah D. Diermeier**, University of Otago, New Zealand  
*Mammary Tumor Associated RNAs as Drivers of Tumor Cell Growth and Metastasis*

Short Talk(s) Chosen from Abstracts

#### Poster Session 1

### WEDNESDAY, MAY 12

#### Mechanisms of Long Noncoding RNA Function

**Xiaohua Shen**, Tsinghua University, China  
*A Glimpse of ncRNA-mediated Transcription and Chromatin Regulation*

**Xuetao Cao**, Nankai University and Chinese Academy of Medical Sciences, China  
*Functions of Long Noncoding RNAs in Innate Immunity*

**Igor Ulitsky**, Weizmann Institute of Science, Israel  
*Functions of Long Noncoding RNAs in Mammalian Cells*

**Karen Adelman**, Harvard Medical School, USA  
*Transcriptional Pausing and Elongation Control at Enhancers*

Short Talk(s) Chosen from Abstracts

#### Enhancer RNAs and Circular RNAs

**Ramin Shiekhattar**, University of Miami, USA  
*Biogenesis and Functions of Enhancer RNAs*

**Jeremy E. Wilusz**, University of Pennsylvania, USA  
*Controlling Circular RNA Levels and Nuclear Export*

**Nikolaus Rajewsky**, Max Delbrück Center for Molecular Medicine, Germany

*Functions of Circular RNAs in Animals*

Short Talk(s) Chosen from Abstracts

#### Poster Session 2

### THURSDAY, MAY 13

#### RNA Structure and Function

**Anna Marie Pyle**, Yale University, USA  
*Structure Insights into Noncoding RNA Function*

**Amanda E. Hargrove**, Duke University, USA  
*Targeting Long Noncoding RNA with Small Molecules*

**Matthew D. Simon**, Yale University, USA  
*Chemical Probing of RNA Structure in Cells*

**Marco Marcia**, EMBL Grenoble, France  
*Structure-Functional Relationships in Long Non-Coding RNAs*

Short Talk(s) Chosen from Abstracts

#### RNA Technologies

**Howard Y. Chang**, Stanford University, USA  
*Genome Regulation by Long Noncoding RNAs*

**Samie Jaffrey**, Weill Medical College of Cornell University, USA  
*Imaging and Manipulating Cellular Functions with RNA Aptamers*

**Lydia M. Contreras**, University of Texas at Austin, USA  
*Expanding Roles and Targeting of ncRNAs via Novel in vivo Characterization Approaches*

Short Talk(s) Chosen from Abstracts

#### Poster Session 3

### FRIDAY, MAY 14

#### Noncoding RNA in Development and Disease

**Joshua T. Mendell**, University of Texas Southwestern Medical Center, USA

*Noncoding RNAs in Post-Transcriptional Regulatory Circuits*

**Lin He**, University of California, Berkeley, USA  
*Noncoding RNAs and Retrotransposons in Development*

**Erwei Song**, Sun-Yat-Sen Memorial Hospital, China  
*Long Noncoding RNA Regulation in Tumor-Immune Evasion*

**John L. Rinn**, University of Colorado Boulder, USA  
*Long Noncoding RNA Regulation in Development*

Short Talk(s) Chosen from Abstracts

#### Workshop 2: The Diversity of Long Noncoding RNA Functions

Short Talks Chosen from Abstracts

#### Repetitive RNAs in Gene Regulation and Development

**Edward B. Chuong**, University of Colorado Boulder, USA  
*Retrotransposons as Regulators of Innate Immunity*

**Maria-Elena Torres-Padilla**, Helmholtz Centre Munich, Germany  
*Transposon Regulation in Early Development*

**Lynne E. Maquat**, University of Rochester Medical Center, USA  
*Retrotransposons as Regulators of Gene Expression*

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

**SATURDAY, MAY 15**

**Departure**