

# KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

## Noncoding RNAs: Form, Function, Physiology (C2)

February 25-March 1, 2018 • Keystone Resort • Keystone, Colorado, USA  
Scientific Organizers: Joshua T. Mendell, Igor Ulitsky and Sohail F. Tavazoie

Sponsored by Ionis Pharmaceuticals, Inc.

Abstract & Scholarship Deadline: October 24, 2017 / Abstract Deadline: November 21, 2017 / Discounted Registration Deadline: December 19, 2017

### SUNDAY, FEBRUARY 25

#### Arrival and Registration

### MONDAY, FEBRUARY 26

#### Welcome and Keynote Address

**Caroline Dean**, John Innes Centre, UK  
*Antisense-Mediated Chromatin Silencing at FLC*

#### Evolution and Structure of Noncoding RNAs

**Igor Ulitsky**, Weizmann Institute of Science, Israel  
*Sequences Enriched in Alu Repeats Drive Nuclear Localization of Long RNAs in Human Cells*

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

**Kevin Weeks**, University of North Carolina, USA  
*Structure-Based Discovery of New Functions in Large RNAs*

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

#### Prokaryotic and Viral Noncoding RNAs

**Jörg Vogel**, University of Würzburg, Germany  
*Grad-seq Discovers the Third Domain of Small RNA-mediated Gene Regulation in Bacteria*

**Ronald R. Breaker**, Yale University, USA  
*Comprehensive Discovery of Ribozymes and Riboswitches*

**Joan A. Steitz**, HHMI, Yale University, USA  
*Nuclear Noncoding RNAs: More Surprises*

#### Short Talk Chosen from Abstracts

#### Poster Session 1

### TUESDAY, FEBRUARY 27

#### Noncoding RNAs in Epigenetic Regulation

**Jeannie T. Lee**, Massachusetts General Hospital, USA  
*Initiation and Maintenance of X-Inactivation*

**Roberto Bonasio**, University of Pennsylvania, USA  
*Regulation of Chromatin Complexes by Protein-RNA Interactions*

**Xiaohua Shen**, Tsinghua University, China  
*Cis-acting lncRNAs in Transcription and Chromatin Regulation*

**Mitchell Guttman**, California Institute of Technology, USA  
*Functional Dissection of Noncoding RNAs*

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

#### Workshop: Highlights of Submitted Abstracts

#### Short Talks Chosen from Abstracts

#### Noncoding RNAs in Subcellular Organization

**Tetsuro Hirose**, Hokkaido University, Japan  
*Dissection of Elements and Machinery of Architectural Noncoding RNAs*

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

**John L. Rinn**, University of Colorado, Boulder, USA  
*High-Throughput Identification of RNA Nuclear Enrichment Sequences*  
**Short Talk Chosen from Abstracts**

#### Poster Session 2

### WEDNESDAY, FEBRUARY 28

#### Transcriptional and Post-Transcriptional Regulation by Noncoding RNAs

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

*Noncoding RNAs in Post-Transcriptional Regulatory Circuits*

**Irene Bozzoni**, University La Sapienza, Rome, Italy  
*Long Noncoding RNAs and Circular RNAs in the Control of Muscle Differentiation*

**Reuven Agami**, Netherlands Cancer Institute, Netherlands  
*Functional Dissection of Enhancer RNAs*

**Ramin Shiekhattar**, University of Miami, USA  
*Integrator Regulates Fidelity of Termination*

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

#### Non-Canonical Roles of tRNAs, snoRNAs, and Repetitive RNAs

**Sohail F. Tavazoie**, Rockefeller University, USA  
*tRNA Fragments in Hypoxic Response and Cancer Progression*

**Britt Glaunsinger**, University of California, Berkeley/HHMI, USA  
*Repetitive Noncoding RNAs in Viral Pathogenesis*

**Matthias W. Hentze**, European Molecular Biology Laboratory, Germany  
*Regulation of Selective Autophagy by the Small Non-Coding Vault RNA1-1*

#### Short Talk Chosen from Abstracts

#### Poster Session 3

### THURSDAY, MARCH 1

#### Noncoding RNAs in Disease

**Stefanie Dimmeler**, University of Frankfurt, Germany  
*Non-coding RNAs in cardiovascular diseases*

**Chris Marine**, VIB, Belgium  
*(Patho-)Physiological Functions of the lncRNA NEAT1*

**Caroline Woo**, Translate Bio, USA  
*Targeting lncRNAs for Gene Upregulation Using Oligonucleotides as a Therapeutic Modality*

**Silvia Zucchelli**, TransSINE Technologies, Japan  
*SINEUPs: A Versatile Tool to Increase Protein Synthesis*

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

#### Unconventional RNA Form and Function

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

**Antonio J. Giraldez**, Yale University School of Medicine, USA  
*Noncoding RNAs and Peptides in Zebrafish Development*

**Lingling Chen**, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, China  
*Biogenesis of Circular RNAs*

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

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**FRIDAY, MARCH 2**

**Departure**