

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Noncoding RNAs: Mechanism, Function and Therapies (A1)

January 12-16, 2020 • Fairmont Chateau Whistler • Whistler, British Columbia, Canada

Scientific Organizers: Howard Y. Chang, Frank W. Rigo and Lynne E. Maquat

Supported by the Directors' Fund

Discounted Abstract & Scholarship Deadline: September 24, 2019 / Abstract Deadline: October 10, 2019 / Discounted Registration Deadline: November 12, 2019

SUNDAY, JANUARY 12

Arrival and Registration

MONDAY, JANUARY 13

Welcome and Keynote Address

Joan A. Steitz, Yale University, USA
Regulatory RNAs

LncRNA Mechanisms

Lynne E. Maquat, University of Rochester Medical Center, USA
Regulation of RNA Metabolism by 3'UTR Alu Elements

Montserrat Anguera, University of Pennsylvania, USA
X-Chromosome Inactivation Maintenance in Immune Cells

Elsa R. Flores, Moffitt Cancer Center, USA
LncRNA and Cancer

Short Talks Chosen from Abstracts

Regulatory RNA Physiologic Functions

Alena Shkumatava, Institut Curie-Centre de Recherche, France
LncRNA in Vertebrate Development

Upasna Sharma, University of California, Santa Cruz, USA
Biogenesis and Function of Small RNAs during Sperm Development and Fertilization

Tamer Sallam, University of California, Los Angeles, USA
LncRNAs in Cardiometabolic Diseases

Short Talks Chosen from Abstracts

Poster Session 1

TUESDAY, JANUARY 14

LncRNA Mechanisms

Howard Y. Chang, Stanford University, USA
Genome Regulation by lncRNAs

Susan B. Carpenter, University of California, Santa Cruz, USA
LncRNA in Immunity

Joshua T. Mendell, HHMI/University of Texas Southwestern Medical Center, USA
Regulatory RNAs in Cancer

John L. Rinn, University of Colorado Boulder, USA
Noncodarnia

Short Talks Chosen from Abstracts

Workshop

Short Talks Chosen from Abstracts

RNA Structure and Function

Yue Wan, Genome Institute of Singapore, Singapore
RNA Structurome Analysis

Anna Marie Pyle, Yale University, USA
LncRNA Structures

Robert Spitale, University of California, Irvine, USA
Emergent Chemical Methods for Probing RNA Structure Inside Living Cells

Short Talks Chosen from Abstracts

Poster Session 2

WEDNESDAY, JANUARY 15

RNA Technologies

Silvana Konermann, The Salk Institute for Biological Studies, USA
Cas13 and New CRISPR Technologies for Direct RNA Targeting

Gene W. Yeo, University of California, San Diego, USA
RNP Discovery and Manipulation

J. Mauro Calabrese, University of North Carolina at Chapel Hill, USA
Functional Classification of lncRNA by k-mer Content

Mitchell Guttman, California Institute of Technology, USA
Global RNA-Chromosome Interactions

Short Talks Chosen from Abstracts

Circular RNAs and RNA Modification

Nikolaus Rajewsky, Max Delbrück Center for Molecular Medicine, Germany

Function of RNA by Single-Cell Sequencing in Space and Time

V. Narry Kim, Institute for Basic Science, South Korea
Regulatory RNA Processing

Chuan He, University of Chicago, USA
RNA Chemical Modification

Short Talks Chosen from Abstracts

Poster Session 3

THURSDAY, JANUARY 16

RNA Therapeutics

Frank Rigo, Ionis Pharmaceuticals, USA

Targeting RNA with Antisense Oligonucleotides to Treat Disease

Sara R. Cherry, University of Pennsylvania, USA
Using Functional Genomics to Define the Interface between Viruses and Long Non-Coding RNAs

Scott A. Ribich, Accent Therapeutics, USA
RNA-Modifying Proteins as Anticancer Targets

James Barsoum, Arrakis Therapeutics, USA
Targeting RNA structures with drug-like small molecules

Short Talks Chosen from Abstracts

Regulatory RNA in Development

Mikiko C. Siomi, University of Tokyo, Japan
piRNA Biogenesis and Function

Christine Mayr, Memorial Sloan Kettering Cancer Center, USA
3' UTR-Mediated Protein-Protein Interactions

Jason Shepherd, University of Utah, USA
Viral-Like Intercellular RNA Transfer in the Nervous System

Short Talk Chosen from Abstracts

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

FRIDAY, JANUARY 17

Departure