

Save the Date for the 2014
Keystone Symposia meeting on:

Mobile Genetic Elements and Genome Evolution

March 9–14, 2014

**Hilton Santa Fe Historic Plaza Hotel
Santa Fe, New Mexico, USA**

Scientific Organizers: Nancy L. Craig, Henry L. Levin and Cedric Feschotte

Keynote Speakers:

David Botstein, Princeton University – *Integrative Genomics*

Haig H. Kazazian, Johns Hopkins University School of Medicine – *L1 and Mammalian Genome Structure*

Session Topics:

- Transposon Applications and Human Health
- A Transposon-Eye View of Primate Evolution
- Mechanisms of Genome Evolution
- The Contribution of Host Factors to DNA Mobility
- The Biological Impact of Mobile DNA, Friend or Foe
- The Interface between Mobile DNA, DNA Replication and DNA Repair/The Molecular Face of Transposition



Discounted Abstract Deadline: **November 6, 2013**

Student/Postdoc Scholarship Application Deadline: **November 6, 2013**

Abstract Deadline: **December 9, 2013**

Discounted Registration Deadline: **January 8, 2014**

For more information and to view the full program,
visit www.keystonesymposia.org/14C2

*Information shown is current as of March 19, 2013
but subject to possible change.*



KEYSTONE SYMPOSIA™
on Molecular and Cellular Biology
Accelerating Life Science Discovery

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on Molecular and Cellular Biology

Mobile Genetic Elements and Genome Evolution (C2)

March 9-14, 2014 • Hilton Santa Fe Historic Plaza Hotel • Santa Fe, New Mexico, USA

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Supported by the Directors' Fund

Abstract & Scholarship Deadline: November 6, 2013 / Abstract Deadline: December 9, 2013 / Discounted Registration Deadline: January 8, 2014

SUNDAY, MARCH 9

MONDAY, MARCH 10

Keynote Session

David Botstein, Princeton University, USA
Integrative Genomics

Haig H. Kazazian, Johns Hopkins University School of Medicine, USA
L1 and Mammalian Genome Structure

Transposon Applications and Human Health

Frederic D. Bushman, University of Pennsylvania, USA
Viral Metagenomes

Kevin L. Gunderson, Illumina, Inc., USA
In vitro Transposition Assays for Next Generation Sequencing Sample Preparation

Short Talk(s) Chosen from Abstracts

A Transposon-Eye View of Primate Evolution

Mark A. Batzer, Louisiana State University, USA
Mobile Elements and Genomic Variation

Geoffrey J. Faulkner, Mater Medical Research Institute, Australia
L1 Mobilization in Mammalian Somatic Cells

John V. Moran, University of Michigan Medical School, USA
L1 Mechanism

Short Talk Chosen from Abstracts

Poster Session 1

TUESDAY, MARCH 11

Mechanisms of Genome Evolution I

Marlene Belfort, University of Albany, SUNY, USA
Self-Splicing Introns and Inteins in Genome Evolution

Speaker to be Announced

Kazufumi Mochizuki, Institute of Molecular Biotechnology of the Austrian Academy of Sciences, Austria
Programmed DNA Elimination

Guillaume Bourque, McGill University, Canada
The Role of Genomic Repeats in Host Gene Regulation

Short Talk(s) Chosen from Abstracts

Mechanisms of Genome Evolution II

Cedric Feschotte, University of Utah, USA
Evolution of the Bat Genome

David M. Kingsley, Stanford University, USA
Stickleback Genome Evolution

Susan R. Wessler, University of California, Riverside, USA
Strategies of Successful Transposable Elements that Rapidly Diversify Genomes

Short Talk Chosen from Abstracts

Poster Session 2

WEDNESDAY, MARCH 12

The Contribution of Host Factors to DNA Mobility

Jef D. Boeke, Johns Hopkins University School of Medicine, USA
Revisiting the Cell Biology of Retrotransposition

Nancy L. Craig, HHMI/Johns Hopkins University School of Medicine, USA
Host Factors and DNA Transposons

Alan N. Engelman, Dana-Farber Cancer Institute, USA
Integrase and HIV DNA Integration

Suzanne B. Sandmeyer, University of California, Irvine, USA
Coordinating Retrotransposition with Cellular Programs

Short Talk(s) Chosen from Abstracts

The Biological Impact of Mobile DNA, Friend or Foe I

Shiv I. S. Grewal, NCI, National Institutes of Health, USA
Specialized Machinery Triggers RNAi to Silence Developmental Genes and Retrotransposons

Henry L. Levin, National Institutes of Health, USA
Biological Impact of Mobile DNA

Damon R. Lisch, University of California, Berkeley, USA
Epigenetic Regulation in Maize

Short Talk Chosen from Abstracts

Poster Session 3

THURSDAY, MARCH 13

The Biological Impact of Mobile DNA, Friend or Foe II

Julius Brennecke[†], IMBA - Institut für Molekulare Biotechnologie GmbH, Austria
piRNA in the Drosophila Germline

Harmit Singh Malik, Fred Hutchinson Cancer Research Center, USA
Genetic Conflicts between Host and Viral Genomes

Speaker to be Announced

Short Talk(s) Chosen from Abstracts

The Interface between Mobile DNA, DNA Replication and DNA Repair/The Molecular Face of Transposition

Rasika M. Harshey, University of Texas at Austin, USA
My Insertion and DNA Repair

Joseph E. Peters, Cornell University, USA

Vulnerability of DNA Replication on the Lagging-Strand Template to Transposition

Fred Dyda, National Institutes of Health, USA
Transposase Structure and Function

Phoebe A. Rice, University of Chicago, USA
Structure of Mu Transpososome

Short Talk Chosen from Abstracts

FRIDAY, MARCH 14