



SGC

Epigenetic Mechanisms in Health and Disease
October 22 - 23, 2009
MaRS Center Auditorium, 101 College St., Toronto

Thursday October 22, 2009, MaRS Auditorium

Draft Program – speaker times may vary

- 8:30 – 9:00 am Registration**
- 9:00 – 9:05 am Opening remarks**
Cheryl Arrowsmith (Chief Scientist, SGC Toronto)
- 9:05 – 10:35 am Session 1: “Chromatin Signaling Mechanisms and Gene Expression”**
Chair: Peter Cheung (Ontario Cancer Institute, Toronto, Canada)
- 9:05 am **Brad Cairns** (Huntsman Cancer Institute, University of Utah, Utah, USA)
Germline Chromatin: Concepts Shared Between Germ Cells and ES Cells
- 9:35 am **Jerry Workman** (Stowers Institute for Medical Research, Kansas City, MO, USA)
The ATAC Histone Acetyltransferase Complex Signals for the Inhibition of the MAP Kinase Cascade Through its MoaE Subunit
- 10:05 am **Robert Martienssen** (Cold Spring Harbor, NY, USA)
Copying and Reprogramming of Heterochromatin with RNAi
- 10:35 am Coffee Break**
- 11:00 – 12:30 pm Session 2: “Environmental Modulation of Epigenetic States I”**
Chair: Tim Willson (GSK, Research Triangle Park, NC, USA)
- 11:00 am **Arturas Petronis** (CAMH, Toronto, Canada)
Epigenetics of Major Psychosis
- 11:30 am **Ian Adcock** (Imperial College London, UK)
Chromatin Biology, Inflammation and Lung Disease
- 12:00 pm **Paolo Sassone-Corsi** (University of California, Irvine, CA, USA)
Epigenetics and Metabolism: The Circadian Clock Connection
- 12:30 pm Lunch**
- 2:00 – 4:00 pm Session 3: “Environmental Modulation of Epigenetic States II”**
Chair: Udo Oppermann (SGC Oxford, Oxford, UK)
- 2:00 pm **Gioacchino Natoli** (European Institute of Oncology, Milan, Italy)
The Epigenome and the Transcriptional Control of Innate Immunity and Inflammation
- 2:30 pm **Vincenzo Pirrotta** (Rutgers University, NJ, USA)
Polycomb Targets and Alternative Chromatin States
- 3:00 pm **Michael Meaney** (McGill University, Montreal, Canada)
Epigenetic Programming of Behavior and Physiology
- 3:30 pm **Rama Natarajan** (City of Hope, Duarte, CA, USA)
Epigenetic Mechanisms Underlying Inflammatory Gene Expression Under Diabetic Conditions
- 4:00 pm Break and Poster Set up**
- 4:30 – 6:00 pm Poster Session & Wine and Cheese Reception**

Friday October 23, 2009, MaRS Auditorium

9:00 – 10:30 am Session 4: “Signaling Mechanisms in Chromatin Biology”

Chair: Jinrong Min (SGC Toronto, Toronto, Canada)

9:00 am **Xiaodong Cheng** (Emory University School of Medicine, Atlanta, GA, USA)

Epigenetic Link Between DNA Methylation and Histone Modifications

9:30 am **Mark Bedford** (M. D. Anderson Cancer Center, Texas, USA)

TDR3 is an Effector Molecule for CARM-Generated Methyl Motifs

10:00 am **Xiang-Jiao Yang** (Goodman Cancer Centre, McGill University, Montreal, Canada)

Different Regulatory Mechanisms for Histone Acetyltransferases and Deacetylases

10:30 am Coffee break

11:00 – 12:30 pm Session 5: “Epigenetic Mechanisms in Development and Disease”

Chair: Gordon Keller (Ontario Cancer Institute, Toronto, Canada)

11:00 am **Bing Ren** (University of California, San Diego, CA, USA)

Epigenomic Landscapes of Pluripotent and Lineage-Committed Human Cells

11:30 am **Antoine Peters** (Friedrich Miescher Institute for Biomedical Research, Basel, Switzerland)

Transgenerational Epigenetic Control of Early Mouse Development

12:00 pm **Christopher Wynder** (McMaster Stem Cell and Cancer Research Institute, Hamilton, Canada)

Regulation of H3K4 Demethylation Controls Neural Differentiation; a Molecular Investigation of Complex Neuro-Developmental Disorders

12:30 – 2:00 pm Lunch

2:00 – 4:30 pm Session 6: “Harnessing the Epigenome for Therapy: Target Validation and Biomarkers”

Chair: Chas Bountra (SGC Oxford, Oxford, UK)

2:00 pm **Sam Aparicio** (BC Cancer Research Centre, Vancouver, BC, Canada)

MLL5 Function in Hematopoiesis and Leukemia; Implications for Therapy

2:30 pm **Victoria Richon** (Epizyme Inc., Cambridge, MA, USA)

Targeting Histone Deacetylases: Development of Vorinostat for the Treatment of Cancer

3:00 pm **Stephen Frye** (Lineberger Cancer Center, University of North Carolina, Chapel Hill, NC, USA)

Promoting Illiteracy in Epigenetics: Antagonists of the Readers of the Epigenetic Code

3:30 pm **Shohei Koide** (University of Chicago, IL, USA)

Synthetic Binding Proteins: New Tools for Epigenetics

4:00 pm **Speaker to be Determined**

4:30 pm Concluding remarks

* Talk titles in Italics are subject to change