

Schedule at a Glance

Sunday October 5th

3:00 pm Check-in
6:00 pm Reception
7:00 pm Dinner
8:00 pm Opening Remarks
8:10 pm Keynote Address

Monday October 6th

7:30 am Breakfast
9:00 am Session 1: Understanding the Magic of the Egg
10:30 am Break and Group Photo
11:00 am Session 2: *Polycomb Group* Genes and Pluripotency
12:30 pm Lunch
1:00 pm Tour (optional)
2:00 pm Session 3: Genomic Regulatory Networks and their Manipulation
3:30 pm Break
4:00 pm Session 4: Fundamentals of the Stem Cell State
6:00 pm Reception
7:00 pm Dinner
8:00 pm Poster Reception

Tuesday October 7th

7:30 am Breakfast
9:00 am Session 5: ATP-Dependent Chromatin Remodelers
10:30 am Break
11:00 am Session 6: Mechanisms
12:30 pm Lunch
2:00 pm Session 7: Epigenetic Mechanisms
3:30 pm Break
4:00 pm Session 8: Propagation and Dynamics of Epigenetic States
6:00 pm Reception
7:00 pm Dinner
8:00 pm Poster Reception

Wednesday October 8th

7:30 am Breakfast
9:00 am First shuttle to airport
10:00 am Second shuttle to airport
11:00 am Last shuttle to airport

NOTE:

All meals are in the **Dining Room**
All talks are in the **Seminar Room**
Posters are located in the **Synapse Room**

Full Schedule

Sunday, October 5th

3:00 pm Check-in

6:00 pm Reception

7:00 pm Dinner

8:00 pm **Introduction and Opening Remarks**
Janet Rossant, Hospital for Sick Children

8:10 pm **Keynote Address**
John Gurdon, University of Cambridge
Nuclear reprogramming by amphibian oocytes and eggs

9:10 pm Refreshments available at Bob's Pub

Monday, October 6th

- 7:30 am Breakfast
- 9:00 am Session 1: Understanding the Magic of the Egg**
Moderator: Magdalena Zernicka-Goetz
- 9:00 am **Magdalena Zernicka-Goetz**, Cambridge University
Origins of pluripotent inner cell mass and trophectoderm and molecular mechanisms behind their specification
- 9:30 am **Marius Wernig**, Stanford University School of Medicine
Epigenetic reprogramming and therapeutic potential of pluripotent stem cells
- 10:00 am **Susan Mango**, University of Utah
*Pluripotency and the onset of differentiation in the *C. elegans* soma*
- 10:30 am Break and Group Photo
- 11:00 am Session 2: Polycomb Group Genes and Pluripotency**
Moderator: Terry Magnuson
- 11:00 am **Bradley Bernstein**, Massachusetts General Hospital
Genomewide studies of the pluripotent chromatin state
- 11:30 am **Laurie Boyer**, Massachusetts Institute of Technology
The histone variant H2AZ is enriched at Polycomb group (PcG) protein target genes in ES cells and is necessary for execution
- 12:00 pm **Terry Magnuson**, University of North Carolina at Chapel Hill
PRC2 is dispensable for ES cell pluripotency
- 12:30 pm Lunch
- 1:00 pm Tour (optional)
- 2:00 pm Session 3: Genomic Regulatory Networks and their Manipulation**
Moderator: Mary Donohoe
- 2:00 pm **Leonid Moroz**, University of Florida
Epigenetic profiling of single functionally characterized neurons in vivo and in regenerating neural circuits
- 2:30 pm **Mary Donohoe**, Weill Medical College of Cornell University
Proteins that mediate homologous X-chromosome pairing

- 3:00 pm **Stuart Schreiber**, Broad Institute/HHMI
From genes to drugs: diversity synthesis and chromatin
- 3:30 pm Break
- 4:00 pm** **Session 4: Fundamentals of the Stem Cell State**
Moderator: Margaret Fuller
- 4:00 pm **Margaret Fuller**, Stanford University School of Medicine
Regulation of self-renewal and differentiation in an adult stem cell lineage
- 4:30 pm **Guy Sauvageau**, University of Montreal
A novel function for Bmi1 in hematopoietic stem cell activity
- 5:00 pm **Wolf Reik**, The Babraham Institute
Epigenetic regulation of lineage commitment and pluripotency in the mammalian embryo
- 6:00 pm Reception
- 7:00 pm Dinner
- 8:00 pm Poster Reception

Tuesday, October 7th

7:30 am Breakfast

9:00 am Session 5: ATP-Dependent Chromatin Remodelers
Moderator: Barbara Panning

9:00 am **Barbara Panning**, University of California, San Francisco
An RNAi screen of chromatin proteins reveals a role for the Tip60-p400 complex in embryonic stem cell identity

9:30 am **Julie Lessard**, Université de Montréal
BAF switching: A novel epigenetic mechanism essential for vertebrate neural development

10:00 am **Gerald Crabtree**, Stanford University/HHMI
Understanding the words of chromatin remodeling

10:30 am Break

11:00 am Session 6: Mechanisms
Moderator: Dirk Schübeler

11:00 am **Andrew Wood**, University of California, Berkeley
X chromosome-wide repression

11:30 am **Dirk Schübeler**, Friedrich Miescher Institute for Biomedical Research
Plasticity of DNA methylation and Polycomb targets during lineage commitment and terminal differentiation of stem cells

12:00 pm **David Gilbert**, Florida State University
Global reorganization of replication domains during embryonic stem cell differentiation

12:30 pm Lunch

2:00 pm Session 7: Epigenetic Mechanisms
Moderator: Joanna Wysocka

2:00 pm **Keji Zhao**, National Heart, Lung and Blood Institute
Dynamic change of chromatin modification during differentiation

- 2:30 pm **Joe Landry**, National Cancer Institute
Essential role of chromatin remodeling factor NURF in early mouse embryos and embryonic stem cells
- 3:00 pm **Joanna Wysocka**, Stanford University School of Medicine
Role of histone H3K4 methyltransferases in cell fate determination
- 3:30 pm Break
- 4:00 pm Session 8: Propagation and Dynamics of Epigenetic States**
Moderator: Richard Young
- 4:00 pm **Richard Young**, Whitehead Institution for Biomedical Research
Transcriptional regulatory circuitry of pluripotent stem cells
- 4:30 pm **Ihor Lemischka**, Mount Sinai School of Medicine/HHMI
Dissecting cell fate regulation in stem cells
- 5:00 pm **Tom Kerppola**, University of Michigan/HHMI
Visualization of chromatin binding specificities of polycomb group proteins in live embryonic stem cells
- 6:00 pm Reception
- 7:00 pm Dinner
- 8:00 pm Poster Reception

Wednesday, October 8th

7:30 am	Breakfast
9:00 am	First shuttle to Dulles
10:00 am	Second shuttle to Dulles
11:00 am	Last shuttle to Dulles