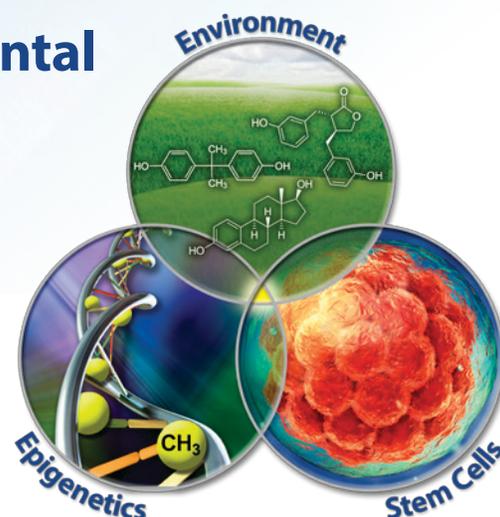


# Epigenetics, Stem Cells, and Environmental Health Symposium and Workshop

**June 1-2, 2017**

NIEHS Building 101, Rodbell Auditorium  
111 TW Alexander Drive, Research Triangle Park, N.C.



## Day 1 – June 1, 2017

8:00 – 8:30 a.m.

### Registration

8:30 – 8:40 a.m.

### Welcome and Opening Remarks

**Darryl Zeldin, M.D.**, NIEHS

8:40 – 10:40 a.m.

### SESSION 1: Pluripotent Stem Cells

**Session Chair: Jill Downen, Ph.D.**, University of North Carolina at Chapel Hill

**Ge Guo, Ph.D.**, Wellcome Trust Centre for Stem Cell Research, University of Cambridge  
*Generation and Characterization of Human Naïve Pluripotent Stem Cells*

**Guang Hu, Ph.D.**, NIEHS

*Post-Transcriptional Regulation of the Pluripotent State*

**Thomas Zwaka, M.D., Ph.D.**, Icahn School of Medicine at Mount Sinai

*Ronin's Role in Creating Regulatory DNA Structures: Blurring the Distinction Between Enhancers and Promoters*

**Konrad Hochedlinger, Ph.D.**, Harvard Stem Cell Institute

*DUSP9 Modulates DNA Hypomethylation in Female Mouse Pluripotent Stem Cells*

10:40 – 11:00 a.m.

### Break

11:00 a.m. – 12:30 p.m.

### SESSION 2: Stem Cells and Development

**Session Chair: Guang Hu, Ph.D.**, NIEHS

**Max Wicha, M.D.**, University of Michigan

*Breast Cancer Stem Cell States and the Tumor Microenvironment*

**Iannis Aifantis, Ph.D.**, New York University

*Long Non-Coding RNA-Mediated Gene Transcription in Hematopoiesis and Leukemia*

**Amander Clark, Ph.D.**, University of California, Los Angeles

*Protecting DNA Methylation in Naïve and Primed Human Pluripotent Stem Cells*

12:30 – 1:30 p.m.

### Lunch

1:30 – 3:00 p.m.

### SESSION 3: Chromatin Biology

**Session Chair: Raja Jothi, Ph.D.**, NIEHS

**Gerald Crabtree, M.D.**, Stanford University

*Chromatin Remodeling: Insights From the Genetics of Human Disease and New Methods*

**Robert Kingston, Ph.D.**, Massachusetts General Hospital

*Nucleosome Compaction as a Regulatory Mechanism During Development*

**Ali Shilatifard, Ph.D.**, Northwestern University

*Principles of Epigenetics and Chromatin in Development and Human Disease*

3:00 – 5:00 p.m.

### POSTER SESSION

## Day 2 – June 2, 2017

- 8:00 – 8:30 a.m.      **Registration**
- 8:30 – 10:00 a.m.    **SESSION 4: Transcriptional Control**  
**Session Chair: Paul Wade, Ph.D., NIEHS**
- Karen Adelman, Ph.D.,** Harvard University  
    *Making Sense of Non-Coding Transcription*
- Ramin Shiekhattar, Ph.D.,** University of Miami  
    *Integrator in MAPK Signaling and Cancer*
- Raja Jothi, Ph.D.,** NIEHS  
    *Transcription at Intragenic Enhancers Attenuates Gene Expression*
- 10:00 – 10:20 a.m.    **Break**
- 10:20 – 11:50 a.m.    **SESSION 5: Epigenetic Regulation**  
**Session Chair: Eda Yildirim, Ph.D.,** Duke University
- Kai Ge, Ph.D.,** National Institute of Diabetes and Digestive and Kidney Diseases  
    *Enhancer Chromatin Modification in Differentiation, Development, and Cancer*
- Anjana Rao, Ph.D.,** La Jolla Institute  
    *Epigenetic and Transcriptional Programs in T Cells During Anti-Viral and Anti-Cancer Responses*
- Sundeep Kalantry, Ph.D.,** University of Michigan  
    *The Orchestration of X-Chromosome Inactivation*
- 11:50 a.m. – 1:00 p.m.    **Lunch**
- 1:00 – 3:00 p.m.      **SESSION 6: Stem Cells and Environment**  
**Session Chair: Erik Tokar, Ph.D.,** NIEHS
- Alvaro Puga, Ph.D.,** University of Cincinnati  
    *Ah Receptor-Mediated Disruption of the Cardiac Embryogenesis Program*
- Dave Sherr, Ph.D.,** Boston University  
    *The Role of the AHR in Development of Cancer-Associated and Tissue-Specific Stem Cells*
- Thea Tlsty, Ph.D.,** University of California, San Francisco  
    *Stress Signaling and Novel Entry to Activation of Sox2, Oct3/4, Nanog, and Cellular Plasticity in Rare Human Somatic Cells*
- Hugh Taylor, M.D.,** Yale University  
    *Endometrial Stem Cells Derived From Bone Marrow, Epigenetic Programming, and the Effect of Endocrine Disruption*
- 3:00 – 3:20 p.m.      **Break**
- 3:20 – 5:00 p.m.      **WORKSHOP: Future Directions and Outcomes**
- 5:00 – 5:10 p.m.      **Closing Remarks**