NCI Symposium on
Chromatin, ncRNA, Methylation & Disease
Natcher Auditorium, NIH, Bethesda, MD
April 16-17, 2015

Thursday, April 16, 2015

8:00 a.m. Registration

9:00 a.m. **Welcome**
Gordon Hager, Ph.D., Chair of the CECB, National Cancer Institute

SESSION 1: DNA METHYLATION ACROSS GENOMES AND SPECIES
Chair: *Yamini Dalal, Ph.D., National Cancer Institute*

9:15 a.m. **"Epigenetic Gene Regulation in a *Arabidopsis*"**
Steve Jacobsen, Ph.D., University of California, Los Angeles

9:45 a.m. **"Molecular Co-evolution of Genomes and Chromatin"**
Daniel Zilberman, Ph.D., University of California, Berkeley

10:15 a.m. **"Epigenomic Signatures of Neuronal Diversity in the Mammalian Brain"**
Joseph Ecker, Ph.D., Salk Institute

10:45 a.m. Break

SESSION 2: CHROMATIN MAINTENANCE IN DEVELOPMENT
Chair: *Dinah Singer, Ph.D., National Cancer Institute*

11:00 a.m. **"H2A.Z: A Molecular Rheostat for Developmental Gene Expression Control"**
Laurie Boyer, Ph.D., Massachusetts Institute of Technology

11:30 a.m. **"Cellular Plasticity of Lsh Mutant Cells"**
Kathrin Muegge, M.D., National Cancer Institute/Leidos Biomedical Research, Inc.

12:00 p.m. **"A Sweet Story About Chromatin"**
Barbara Panning, Ph.D., University of California, San Francisco

12:30 p.m. **LUNCH BREAK AND POSTER VIEWING (Authors present from 1:00-2:30)**

SESSION 3: ncRNA INTERACTIONS WITH CHROMATIN STRUCTURE
Chair: *Shiv Grewal, Ph.D., National Cancer Institute*

2:30 p.m. **"Epigenetic Regulation of Chromatin States at Centromeres and Retrotransposons in Fission Yeast"**
Karl Ekwall, Ph.D., Karolinska Institute

3:00 p.m. **"Noncoding RNAs Drive Chromatin Assembly at Centromeres"**
Yamini Dalal, Ph.D., National Cancer Institute

3:30 p.m. **"Activation of X Inactivation"**
Joost Gribnau, Ph.D., Erasmus University Medical Center

4:00 p.m. Break

SESSION 4: TRANSCRIPTOME REGULATION
Chair: *David Levens, M.D., Ph.D., National Cancer Institute*

4:15 p.m. **"B Cell Genomics"**
Rafael Casellas, Ph.D., National Institute of Arthritis and Musculoskeletal and Skin Diseases

4:45 p.m. **"TBD"**
Mike McManus, Ph.D., University of California, San Francisco

5:15 p.m. **"Regulatory Landscape of Embryonic Stem Cells"**
Richard Young, Ph.D., Whitehead Institute/Massachusetts Institute of Technology

5:45 p.m. Adjourn

Friday, April 17, 2015

SESSION 5: NUCLEAR ORGANIZATION
Chair: *Susan Gottesman, Ph.D., National Cancer Institute*

9:00 a.m. **"Chromatin Structure, Insulators, and Long Range Interactions in the Nucleus"**
Gary Felsenfeld*, Ph.D., National Institute of Diabetes and Digestive and Kidney Diseases*

9:30 a.m. **"Stress-induced Rearrangement of Chromosome 3D Organization"**
Victor Corces, Ph.D., Emory University

10:00 a.m. **"How the Nuclear Envelope Controls Genome Function"**
Martin Hetzer, Ph.D., Salk Institute

10:30 a.m. Break

SESSION 6: DNA PACKAGING, AGING AND DISEASE
Chair*: Mirit Aladjem, Ph.D., National Cancer Institute*

10:45 a.m. **"Histone Variations in Cancer"**
Emily Bernstein, Ph.D., Mt. Sinai Hospital

11:15 a.m. **"Chromatin Remodeling by Architectural Proteins"**
Michael Bustin, Ph.D., National Cancer Institute

11:45 a.m. **"Epigenetic Alterations in Age-associated Disease"**
Shelley Berger, Ph.D., University of Pennsylvania

12:15 p.m. **LUNCH BREAK AND ADDITIONAL POSTER VIEWING**

SESSION 7: CHROMATIN AND THE DNA DAMAGE RESPONSE
Chair: *Andre Nussenzweig, Ph.D., National Cancer Institute*

1:15 p.m. **"Regulation of DNA Double-strand Break Repair by the Cell Cycle"**
Daniel Durocher, Ph.D., University of Toronto

1:45 p.m. **"Stop Relaxing: Genome Maintenance Meets Chromatin Condensation"**
Philipp Oberdoerffer, Ph.D., National Cancer Institute

2:15 p.m. **"Nucleosome Dynamics During Processing of DNA Breaks"**
Brendan Price, Ph.D., Dana-Farber Cancer Institute/Harvard University

2:45 p.m. Break

SESSION 8: NUCLEAR INTEGRITY
Chair: *Philipp Oberdoerffer, Ph.D., National Cancer Institute*

3:00 p.m. **"Mechanisms Controlling the Integrity of Replicating Chromosomes"**
Marco Foiani, *Ph.D.,* FIRC Institute of Molecular Oncology and University of Milan

3:30 p.m. **"Unraveling the Molecular Basis of Immunodeficiency in ICF Syndrome"**
Haico van Attikum, Ph.D., Leiden University Medical Center

4:00 p.m. **"Control of Centrosomes by Telomeres and Centromeres - In Both Meiosis and Mitosis"**
Julie Cooper, Ph.D., National Cancer Institute

4:30 p.m. Adjourn