

CONFERENCE PROGRAM

DAY ONE - MONDAY 11 MARCH

8:00	Registration
10:00	Welcome address Steven Henikoff, co-Editor-in-Chief <i>Epigenetics & Chromatin</i> , Fred Hutchinson Cancer Research Center, Seattle, USA
Session 1:	Assembling and disassembling nucleosomes. Chair: Jessica Tyler
10:15	The mechanism and consequences of chromatin assembly and disassembly Jessica Tyler, MD Anderson Cancer Center, Houston, USA
10:45	Using the lagging strand to study chromosome replication Iestyn Whitehouse, Memorial Sloan Kettering Cancer Center, New York, USA
11:15	Histone modifications regulate DNA replication coupled nucleosome assembly Zhigou Zhang, Mayo Clinic, Rochester, USA
11:45	Selected talk - A role for histone acetyltransferase 1 in mammalian development, genome stability and the processing of newly synthesized histones H3 and H4 Mark R Parthun, The Ohio State University, Columbus, USA
12:00	Selected talk - HIRA-mediated H3.3 deposition is required for <i>de novo</i> paternal nuclear envelope formation in mouse zygotes Azusa Inoue, Howard Hughes Medical Institute, Children's Hospital of Boston and Harvard Medical School, Boston, USA
12:15 – 13:15	Lunch
Session 2:	Methylating and demethylating DNA. Chair: Adrian Bird
13:15	The dinucleotide CG as a genomic signalling module Adrian Bird, University of Edinburgh, UK
13:45	MeCP2 binds to 5hmc enriched within active genes and accessible chromatin in the nervous system Nathaniel Heintz, The Rockefeller University, New York, USA
14:15	Multivalent histone engagement by the linked Tudor and PHD domains of UHRF1 is required for DNA methylation maintenance Brian Strahl, University of North Carolina at Chapel Hill, USA
14:45	Selected talk - Correlations between DNA methylation levels and nucleosome enrichment in the human genome Clayton K Collings, Purdue University, West Lafayette, USA
15:00-15:30	Coffee

CONFERENCE PROGRAM

Session 3:	Modifying and demodifying histones. Chair: Yang Shi
15:30	Investigating the molecular mechanisms of transgenerational epigenetic inheritance Yang Shi, Harvard Medical School, Boston, USA
16:00	Quantitative proteomic tools for analyzing histone modifications Benjamin Garcia, University of Pennsylvania, Philadelphia, USA
16:30	Selected talk - Identification of promoter targets of enhancers by epigenetic knockdown using TAL DNA binding proteins Eric M Mendenhall, Broad Institute and Massachusetts General Hospital, Boston, USA
16:45	Selected talk - Methylation of histone H3 at lysine 23 in meiotic heterochromatin Romeo Papazyan, The Johns Hopkins University School of Medicine, Baltimore, USA
17:00	Selected talk - Polycomb-independent activity of EZH2 in castration resistant prostate cancer Xexin Xu, Dana-Farber Cancer Institute and Harvard Medical School, USA
17:15	Sponsored talk - Successful implementation of ChIP-seq antibody quality control at Diagenode using automated ChIP protocol on the SX-8G IP-Star® Compact Ignacio Mazon, Diagenode Inc., Denville NJ, USA
17:30-19:30	Poster Session 1

DAY TWO - TUESDAY 12 MARCH

Session 4:	Chromatin changes during replication, repair and recombination. Chair: Geneviève Almouzni
09:00	Chromatin assembly from nucleosome to heterochromatin: the issue of DNA damage Geneviève Almouzni, Institut Curie, Paris, France
09:30	Chromatin modifications and dynamics during repair of a double-strand chromosome break in budding yeast. James Haber, Brandeis University, Waltham, USA
10:00	Selected talk - The hematopoietic master regulator RUNX1 reshapes the epigenetic landscape at the onset of hematopoiesis Constanze Bonifer, University of Leeds, UK
10:15	Selected talk - Chromatin and higher-order chromosome organization shape the recombination landscape in <i>C. elegans</i> Chitra V Kotwaliwale, University of California, Berkeley, USA
10:30-11:00	Coffee
Session 5:	Interactions between transcription factors and nucleosomes. Chair: Frank Pugh
11:00	Genome-wide interplay between chromatin and the transcription machinery B Franklin Pugh, Penn State University, University Park, USA
11:30	Reprogramming the chromatin landscape at eukaryotic regulatory elements Gordon Hager, National Cancer Institute, Bethesda, USA
12:00	Selected talk - The landscape of RNA polymerase II transcription initiation in <i>C. elegans</i> reveals a novel enhancer architecture Julie Ahringer, University of Cambridge, UK
12:15	Selected talk - The structure of Polycomb-repressed chromatin in the bithorax complex Sarah Bowman, Massachusetts General Hospital and Harvard Medical School, Boston USA

CONFERENCE PROGRAM

12:30-13:30	Lunch
12:50-13:20	Sponsored talk - Critical factors for successful ChIP John M Rosenfeld, Group Leader Epigenetics R&D, EMD Millipore, Temecula, CA, USA
Session 6:	Chromatin changes during fertilization and early development. Chair: Bradley Cairns
13:30	Germline epigenetics, and reprogramming in zebrafish early embryos Bradley R Cairns, University of Utah, Salt Lake City, USA
14:00	Gene dosage in mammals: characterization of haploid embryonic stem cells Anton Wutz, University of Cambridge, UK
14:30	Selected talk - Chd5 orchestrates chromatin remodeling during spermiogenesis Wangzhi Li, Cold Spring Harbor laboratory, USA
14:45	Selected talk - Heterochromatic silencing in <i>Drosophila melanogaster</i> Sarah CR Elgin, Washington University in St Louis, USA
15:00-15:30	Coffee
Session 7:	Transcriptional modification of nucleosomes. Chair: Jerry Workman
15:30	Chromatin reassembly following RNA polymerase II transcription Jerry Workman, Stowers Institute for Medical Research, Kansas City, USA
16:00	Co-transcriptional histone methylations Stephen Buratowski, Harvard Medical School, Boston, USA
16:30	Selected talk - ISWI and CHD chromatin remodelers bind to promoters but act in gene bodies Gabriel E Zentner, Fred Hutchinson Cancer Research Center, Seattle, USA
16:45	Selected talk - Towards a causative function of histone modifications in regulation of chromatin dynamics and transcription Robert Schneider, Max Planck Institute of Immunobiology and Epigenetics, Freiburg, Germany
17:00 - 19:00	Poster Session 2
19:00 – 22:00	Conference dinner

DAY THREE - WEDNESDAY 13 MARCH

Session 8:	Interactions between non-coding RNA and chromatin (shaping chromatin with RNA). Chair: Jeannie Lee
09:00	Sponsored talk - Discover the interactions between non-coding RNA and chromatin through RIP and RiboTrap Wushouer Ouerkaxi, MBL International Corporation
09:15	The roles of long noncoding RNA in epigenetic regulation Jeannie Lee, Massachusetts General Hospital and Harvard Medical School, Boston, USA
09:45	Epigenetic genome control by heterochromatin and RNAi machinery Shiv Grewal, National Cancer Institute, Bethesda, USA
10:15	Selected talk - XACT, a long non-coding transcript coating the active X chromosome in human pluripotent cells Claire Rougeulle, Univ Paris Diderot, Sorbonne Paris Cité, Epigenetics and Cell Fate, Paris, France

CONFERENCE PROGRAM

10:30 Selected talk - RNA Antisense Purification (RAP) identifies novel mechanisms of lncRNA localization to chromatin
Jesse M Engreitz, Broad Institute of Harvard and MIT, Cambridge, USA

10:45-11:15 Coffee

Session 9: Chromatin changes and remembering cell fate through mitosis. Chair: Kenneth Zaret

11:15 **Activating the genome during development and exit from mitosis**
Kenneth Zaret, University of Pennsylvania, Philadelphia, USA

11:45 **Regulating gene expression through transcriptional compensation**
David Spector, Cold Spring Harbor Laboratory, USA

12:15 **Genome wide analysis of DNA methylation and nucleosome positioning**
Peter A Jones, University of Southern California, Los Angeles, USA

12:45 **Selected talk - Prior epigenetic priming of cytokine genes in naive T cells is required for their subsequent activation by inducible enhancers**
Peter N Cockerill, University of Leeds, UK

13:00-14:00 Lunch

Session 10: Chromatin interactions. Chair: Job Dekker

14:00 **Folding principles of genomes**
Job Dekker, UMass Medical School, Worcester, USA

14:30 **Controlling long-range genomic interactions to reprogram the β -globin locus**
Gerd Blobel, University of Pennsylvania, Philadelphia, USA

15:00 **Selected talk - Charting the regulatory landscape of the mouse genome *in vivo***
Orsolya Symmons, European Molecular Biology Laboratory, Heidelberg, Germany

15:15 **Selected talk - Role of cohesin and CTCF in organizing the three-dimensional structure of the human genome**
Jessica Zuin, Erasmus Medical Center, Rotterdam, The Netherlands

15:30 **Selected talk - Establishment of pericentromeric heterochromatin in development**
Maria-Elena Torres-Padilla, IGBMC, Strasbourg, France

Closing remarks