CEEHRC 9th Canadian Conference on Epigenetics
Full Agenda

Monday, November 13, 2023		
16:00	18:00	Registration
18:00	19:00	**Keynote 1** **Chair: Mathieu Lupien**
		Michael Taylor (Baylor College of Medicine) *Genetic and Epigenetic Events Conspire Together to Prevent Differentiation in the Rhombic Lip Resulting in Medulloblastoma*
19:00	22:00	Reception

Tuesday, November 14, 2023		
07:00	08:20	Breakfast
08:20	08:30	**Open Meeting** **Martin Hirst**
		Session 1: Chromatin Regulation Chair: Martin Hirst
08:30	09:00	Anjana Rao (La Jolla Institute for Immunology) *Mutations in clonal haematopoiesis compromise heterochromatin integrity*
09:00	09:30	Carol Chen (BC Cancer) *Histone H3.3 mutations in cancer & neurodevelopmental syndrome*
09:30	09:45	Michael Hendzel (University of Alberta) *Physicochemical control of molecular trafficking through chromatin and subnuclear compartments*
09:45	10:00	Shanelle Mullany (University of Toronto) *Euchromatin Hopping: A Novel Insight into Enhancer-Mediated Chromatin Remodeling and Transcriptional Regulation*
10:00	10:30	Sponsor Coffee Break
		Epigenetics Technologies Chair: Guillaume Bourque
10:30	10:45	Anmol Kapoor (Complete Genomics) *TBA*
10:45	11:00	Peter Hurley (Olink Proteomics) *Empowering multiomics repertoire with proteomics enhances biomarker discovery*
11:00	11:15	Hussein Daoud (Illumina) *Illumina Technology and Application Updates: 2023-2024*
11:15	11:30	Tim Beech (biomodal) *TBA*
11:30	12:30	Lunch
		Session 2: Developmental Epigenetics Chair: Carolyn Brown
12:30	13:00	Julie Claycomb (University of Toronto) *Untangling Germline small RNA Pathways in C. elegans*
13:00	13:30	Sophie Petropoulos (CRCHUM, Université de Montréal) *Small ncRNAs in preimplantation development*
13:30	13:45	Mario Filice (University of Toronto) *An Enhancer Responsible for Regulating Multiple Placentation Associated Genes*
13:45	14:00	Lisa-Marie Legault (Université de Montréal) *Early Preimplantation Alcohol Exposure: Developmental Effects and Persistent Epigenomic and Cognitive Implications*
14:00	14:30	Sponsor Coffee Break
		Rapid Fire Chair: Serge McGraw
14:30	14:35	Vahid Akbari (BC Cancer) *DNA Accessibly and Methylation Profiling in Human Using Long-Read Sequencing and Adenine Modification*

14:35	14:40	Ella Beraldo (University of British Columbia) *Sex differences in DNA methylation associated with prenatal maternal stress in the placenta: The QF2011 Queensland Flood Study*
14:40	14:45	Jieying Cui (University of British Columbia) *Diversified Role of TBP in the Establishment of Complexity in Eukaryotic Transcription Initiation Systems*
14:45	14:50	Andrew Duncan (University of Toronto) *Can deep learning crack the cis-regulatory code? A case study with mouse embryonic stem cell enhancers*
14:50	14:55	Laura Godfrey (Dana-Farber Cancer Institute / Harvard University) *P300/CBP, and not MLL3/4, are essential drivers of pathogenic enhancer activity in Ewing-Sarcoma*
14:55	15:00	Jiyoung Han (BC Children's Hospital Research Institute) *Sex-influenced DNAm profiles of isolated human placental cell types*
15:00	15:05	Dennis Hecker (Goethe University Frankfurt) *Using network propagation to walk through the enhancer-gene regulatory network*
15:05	15:10	Tina Keshavarzian (University of Toronto) *Discerning the regulatory processes underlying cell states in locally advanced metastatic prostate cancer using single-cell multiomics*
15:10	15:15	Megan Rowland (University of British Columbia) *Investigating the Role of Baf53b in Mouse Neuronal Gene Expression and Autism Behaviours*
15:15	15:20	Gerald Shipman (McGill University) *Systematic Perturbation Analysis of H3K36 methyltransferases reveals novel functions of NSD3*
		Keynote 2 Chairs: Jocelyn Chen, Sanne Janssen
15:30	16:30	Karen Adelman (Harvard Medical School) *Global identification of SWI/SNF targets reveals compensation by EP400*
18:30	20:00	Dinner
20:00	22:00	**Poster Session 1**

Wednesday, November 15, 2023		
07:00	08:30	Breakfast
		Session 3: Cancer Epigenomics Chair: Mathieu Lupien
08:30	09:00	Juri Reimand (Ontario Institute for Cancer Research) *Mining cancer epigenomes for driver and passenger mutations*
09:00	09:30	Steve Jones (BC Cancer) *Epigenomics in aiding hereditary cancer predisposition and more*
09:30	09:45	El Bachir Affar (Centre de recherche de l'Hôpital Maisonneuve-Rosemont, Université de Montréal) *O-GlcNAcylation of FOXK1 in epigenomic regulation and cancer*
09:45	10:00	Arghavan Ashouri (University Health Network) *Decoding the Epigenetic and Transcriptional Signatures of Pathogenic B-Cell Clones in Individuals at Risk of Transformation to B-cell Lymphomas*
10:00	10:30	Sponsor Coffee Break
		Session 4: Epigenetic Mechanisms I Chair: Annie Ciernia
10:30	11:00	Jamie Kramer (Dalhousie University) *Trithorax supports long term memory through epigenetic maintenance of metabolic state*
11:00	11:30	Mathieu Lupien (Princess Margaret Cancer Centre) *Chromatin reprogramming at repeat DNA shapes oncogenesis*
11:30	11:45	Ryuichiro Nakato (University of Tokyo) *Large-scale multi-omics analysis to dissect the context-specific role of cohesin in chromatin folding and gene expression*
11:45	12:00	Ravinder Bahia (University of Calgary) *Protein arginine methyltransferase 3, (PRMT3), regulates cancer stem cell features*
12:00	14:00	Lunch & Learn
		Session 5: Computational Epigenomics Chair: Steven Jones

14:00	14:30	Andrew Adey (Oregon Health and Science University) *Atlas-scale single-cell DNA methylation*
14:30	14:45	Pierre-Etienne Jacques (Université de Sherbrooke) *Metadata prediction from epigenomic data applied to over 50,000 public datasets*
14:45	15:00	Marjan Farahbod (Simon Fraser University) *Integrative chromatin state annotation of 234 human ENCODE4 tissue and cell types using Segway reveals disease drivers*
15:00	15:15	Audrey Baguette (McGill University) *Single-cell profiling of the DNA Methylation and 3D genomic structure in Diffuse Intrinsic Pontine Glioma Tumors Show Intratumor Heterogeneity*
15:15	15:45	Sponsor Coffee Break
		Session 6: Epigenetic Regulation Chair: Steve Bilodeau
15:45	16:15	Amelie Fradet-Turcotte (CHU de Québec, Université Laval) *H2A histone variants in the cellular response to replication stress*
16:15	16:30	Arneet Saltzman (University of Toronto) *PRC1-mediated histone H2A monoubiquitylation at neuronal enhancers*
16:30	16:45	Corina Nagy (Douglas Research Centre) *Differential Chromatin Architecture and Regulatory Variants in Deep Layer Excitatory Neurons and Grey Matter Microglia Contribute to Major Depressive Disorder*
16:45	17:00	Sanne Janssen (University of British Columbia) *Insights into the molecular basis of chromatinopathies: dissecting crosstalk between histone modifiers and their impact on transcription*
18:00	19:30	Dinner
19:30	21:30	**Poster Session 2**

Thursday, November 16, 2023		
07:00	08:00	Breakfast
		Session 7: Epigenetic Mechanisms II Chair: Matthew Lorincz
08:00	08:30	Gavin Kelsey (Babraham Institute) *LTRs as mediators of intergenerational epigenetic inheritance*
08:30	09:00	Samantha Wilson (McMaster University) *Non-invasive epigenomic methods and characterization of placental dysfunction*
09:00	09:15	Mathieu Schulz (CRCHUM, Université de Montréal) *Capture of Environmental Sensors Present in the Human Sperm DNA Methylome of Obese Men*
09:15	09:30	Mzwanele Ngubo (Ottawa Hospital Research Institute) *Loss of histone H4K16 acetylation promotes error-prone DNA damage repair in Hutchinson-Gilford Progeria vascular smooth muscle cells*
09:30	10:00	Sponsor Coffee Break
10:00	10:30	**CEEHRC Updates** Martin Hirst
10:30		Bus Departures