

# Program

## Tuesday, July 21

5:30-7:00	Registration	HUB Auditorium Lobby
7:00-7:15	Welcoming Remarks <b>Song Tan</b> and <b>Frank Pugh</b> (The Pennsylvania State University)	
7:15-8:15	<i>“Chromatin Dynamics of Histone H2A.Z and CENP-A at Yeast Promoters and Centromeres”</i> <b>Carl Wu</b> (Howard Hughes Medical Institute, Janelia Research Campus)	1
8:15-9:30	Welcome Reception	Art Alley

## Wednesday, July 22

7:30-9:30	<b>Registration Check-In</b>	<b>Heritage Hall</b>
<b>Session I: Chromatin Structure &amp; Mechanism</b>		<b>HUB Auditorium</b>
<b>Chair: Lu Bai</b> (The Pennsylvania State University)		
8:30-9:05	<i>“A Functional and Structural Dissection of the Chromatin Remodeling Enzyme ISWI”</i> <b>Felix Müller-Planitz</b> (Ludwig-Maximilians-Universität München)	2
9:05-9:40	<i>“Histone Octamer Distortion Promotes ATP-Driven Nucleosome Sliding”</i> <b>Geeta Narlikar</b> (University of California, San Francisco)	3
9:40-10:00	<i>“Domain-Domain Communication within the Chd1 Remodeler Directs Nucleosome Sliding”</i> <b>Greg Bowman</b> (Johns Hopkins University)	21
10:00-10:20	<i>“Crystal Structure of the PRC1 E3-E2 Ubiquitylation Module Bound to the Nucleosome”</i> <b>Robert McGinty</b> (The Pennsylvania State University)	22
10:20-10:50	Coffee Break	<b>Heritage Hall</b>
10:50-11:25	<i>“Mediator Kinases and Transcription Regulation”</i> <b>Dylan Taatjes</b> (University of Colorado, Boulder)	4
11:25-12:00	<i>“Structural Basis for Histone H2B Deubiquitination by the SAGA DUB Module”</i> <b>Cynthia Wolberger</b> (Johns Hopkins University School of Medicine)	5
12:00-2:00	- <b>Faculty:</b> Lunch Break - <b>Young Scientist:</b> (post-doc & younger) Meet the Speaker Luncheon	<b>On Your Own</b> <b>Heritage Hall</b>
<b>Session II: Development &amp; Networks</b>		<b>HUB Auditorium</b>
<b>Chair: Stirling Churchman</b> (Harvard Medical School)		
2:00-2:35	<i>“Repressed Enhancers During Drosophila Pattern Formation are Poised for Silencing”</i> <b>Julia Zeitlinger</b> (Stowers Institute for Medical Research)	6
2:35-3:10	<i>“Genome Regulation During Developmental Transitions”</i> <b>Eileen Furlong</b> (EMBL Heidelberg)	7
3:10-3:30	<i>“Characterizing Context-Dependent Transcription Factor Activity During Cellular Programming”</i> <b>Shaun Mahony</b> (The Pennsylvania State University)	23
3:30-3:50	<i>“Cracking the C/EBP<math>\beta</math> Code in Liver and Adipose”</i> <b>David Steger</b> (University of Pennsylvania)	24
3:50-4:20	Coffee Break	<b>Heritage Hall</b>

4:20-4:55	“Overcoming Chromatin Barriers to Cell Programming” <b>Kenneth Zaret</b> (Perelman School of Medicine at the University of Pennsylvania)	8
4:55-5:30	“C2H2 Zinc Finger Proteins and the Regulation of the Human Genome” <b>Tim Hughes</b> (University of Toronto)	9
5:30-7:30	Program/Break Dinner	<b>On Your Own</b>
7:30-9:30	Reception and Poster Session I (odd numbered posters will present)	<b>Alumni Hall</b>

## Thursday, July 23

<b>Session III: Nuclear Organization</b>		<b>HUB Auditorium</b>
<b>Chair: Feng Yue</b> (Penn State Hershey)		
8:30-9:05	“The Role of Architectural Proteins in the 3D Organization of the Genome” <b>Victor Corces</b> (Emory University)	10
9:05-9:40	“3D Genome organization and Gene Transcription Regulation in Human Cells” <b>Yijun Ruan</b> (The Jackson Laboratory for Genomic Medicine)	11
9:40-10:00	“Inter-Allelic Gene Regulation in Budding Yeast” <b>Lu Bai</b> (The Pennsylvania State University)	25
10:00-10:20	“Single Molecule Imaging of p53’s Dynamic Interaction with Chromatin” <b>Robert Coleman</b> (Albert Einstein College of Medicine)	26
10:20-10:50	Coffee Break	<b>Alumni Hall</b>
10:50-11:25	“Mechanisms of Epigenetic Transcriptional Memory” <b>Jason Brickner</b> (Northwestern University)	12
11:25-12:00	“CENP-A Nucleosomes: Marking Centromere Location for the Long Haul” <b>Ben Black</b> (Perelman School of Medicine at the University of Pennsylvania)	13
12:00-2:00	Lunch Break	<b>On Your Own</b>

## 2:00-5:30 Concurrent Oral Platform Presentation

<b>Session A:</b>		<b>HUB Auditorium</b>
<b>Chair: David Steger</b> (University of Pennsylvania)		
2:00-2:20	“Sex Comb on Midleg (Scm) is a Functional Link Between PcG Repressive Complexes in <i>Drosophila</i> ” <b>Hyuckjoon Kang</b> (Harvard Medical School)	44
2:00-2:40	“AUTS2 Confers Gene Activation to Polycomb Group Proteins in the CNS” <b>Zhonghua Gao</b> (NYU School of Medicine)	38
2:40-3:00	“Distinct Cellular Assembly Architecture of Polycomb Complexes on Chromatin Revealed by Single-Molecule Chromatin Immunoprecipitation Imaging” <b>Xiaojun Ren</b> (University of Colorado, Denver)	43
3:00-3:20	“Understanding the Mechanisms of Human Transcription Initiation Using Single-Molecule Fluorescence Colocalization” <b>Abigail Horn</b> (University of Colorado, Boulder)	39
<b>Session C: Heritage Hall</b>		
<b>Chair: Robert Coleman</b> (Albert Einstein College of Medicine)		
2:00-2:20	“Mechanistic Characterization of How Spt4/5 Alters RNAPII Arrest with in the Nucleosome” <b>Brooks Crickard</b> (The Pennsylvania State University)	34

2:00-2:40	<i>“Molecular Mechanism of Transcriptional Fidelity Control and DNA Modifications Recognition by RNA Polymerase II”</i> <b>Dong Wang</b> (University of California, San Diego)	31
2:40-3:00	<i>“Nature’s Imitation Game: Decipher the Combinatorial CTD Code for Eukaryotic Transcription”</i> <b>Yan Jessie Zhang</b> (University of Texas, Austin)	48
3:00-3:20	<i>“Interaction of Cockayne Syndrome Protein B (CSB) and CTCF in the Relief of Oxidative Stress”</i> <b>Hua-Ying Fan</b> (University of Pennsylvania)	32
3:20-3:50	Coffee Break	<b>Alumni Hall</b>
<b>Session B: HUB Auditorium</b>		
<b>Chair: Zhonghua Gao</b> (NYU School of Medicine)		
3:50-4:10	<i>“Histone H3(K9) Dimethylation as a Hallmark of Epigenetic and Transcriptional Changes Associated with Normal Myeloid Differentiation and Leukemia”</i> <b>Sergei Grigoryev</b> (Penn State Hershey College of Medicine)	42
4:10-4:30	<i>“Extranucleosomal DNA Enhances the Activity of the LSD1/CoREST Histone Demethylase Complex”</i> <b>Sang-Ah Kim</b> (The Pennsylvania State University)	37
4:30-4:50	<i>“Mechanistic Insight into the Role of the Paf1 Complex in Histone Modification”</i> <b>Branden Van Oss</b> (University of Pittsburgh)	40
4:50-5:10	<i>“PfAP2-1 is an essential transcription Factor of the Malaria Parasite Associated with Invasion-Related Genes”</i> <b>Joana Santos</b> (The Pennsylvania State University)	41
5:10-5:30	<i>“The Drosophila General Regulatory Factor MIBP Drives Ribosomal Protein Gene Expression by Recruiting TRF2 to their Promoters”</i> <b>Doug Baumann</b> (The Pennsylvania State University)	36
<b>Session D: Heritage Hall</b>		
<b>Chair: Yan Jessie Zhang</b> (University of Texas, Austin)		
3:50-4:10	<i>“High-Resolution Assays Reveal Details of Mammalian Enhanceosome Organization and Function”</i> <b>William Lai</b> (The Pennsylvania State University)	33
4:10-4:30	<i>“Dynamic Structure and Organization of Active Enhancers During Specifications and Maintenance of Motor Neuron Identity”</i> <b>Ho Sung Rhee</b> (Columbia University)	47
4:30-4:50	<i>“Genome-Wide Binding Dynamics of Cohesin in Response to Stress Reveals 3D Spatial Reorganization of p53 Target Genes”</i> <b>Jean-François Millau</b> (University of Sherbrooke)	45
4:50-5:10	<i>“Probing Chromatin with MNase: A Story Beyond Nucleosome Occupancy”</i> <b>Michael Tolstorukov</b> (Massachusetts General Hospital)	46
5:10-5:30	<i>“A Scalable Genome Editing-Based Approach for Mapping the Human Protein Interactome”</i> <b>Mathieu Dalvai</b> (Laval University)	35
5:30-7:30	Program/Dinner Break	<b>On Your Own</b>
7:30-9:30	Poster Session II and Reception (even numbered posters)	<b>Alumni Hall</b>

## Friday, July 24

<b>Session IV: Chromatin Regulation</b>		<b>HUB Auditorium</b>
<b>Chair: Shaun Mahony</b> (The Pennsylvania State University)		
8:30-9:05	<i>"Epigenomic Signatures of Neuronal Diversity in the Mammalian Brain"</i> <b>Joseph Ecker</b> (Howard Hughes Medical Institute, Salk Institute for Biological Studies)	14
9:05-9:40	<i>"Chromatin Regulators as Cancer Dependencies"</i> <b>Christopher Vakoc</b> (Cold Spring Harbor Laboratory)	15
9:40-10:00	<i>"Genome-Wide In Vitro Reconstitution of Physiological Nucleosome Positions with Purified Factors"</i> <b>Nils Krietenstein</b> (LMU, University of Munich)	27
10:00-10:20	<i>"Structure of Transcribed Chromatin is a Sensor of DNA Damage"</i> <b>Vasily Studitsky</b> (Fox Chase Cancer Center)	28
10:20-10:50	Coffee Break	<b>Noontime Lounge</b>
10:50-11:10	<i>"Dynamic Enhancer Landscape During Pancreatic Differentiation of Human ES Cells"</i> <b>Feng Yue</b> (Penn State Hershey)	29
11:10-11:45	<i>"Painting Chromatin with Novel Protein Chemistries"</i> <b>Tom Muir</b> (Princeton University)	16
11:45-1:30	Lunch Break	<b>On Your Own</b>
<b>Session V: Transcription</b>		<b>HUB Auditorium</b>
<b>Chair: Christopher Vakoc</b> (Cold Spring Harbor Laboratory)		
1:45-2:20	<i>"Visualization and Evolution of Developmental Enhancers"</i> <b>Michael Levine</b> (Princeton University)	17
2:20-2:55	<i>"Transcription-Associated Histone Chaperones: Guardians of the Epigenome?"</i> <b>François Robert</b> (Institut de recherches cliniques de Montreal)	18
2:55-3:15	<i>"O-GlcNAc Cycling Regulates RNA Polymerase II Pausing and Elongation"</i> <b>Brian Lewis</b> (National Institute for Health, Center for Cancer Research)	30
3:15-3:45	Coffee Break	<b>Noontime Lounge</b>
3:45-4:20	<i>"Interplay between RNA Polymerase II activity and promoter architecture in specification of transcription start sites in Saccharomyces cerevisiae"</i> <b>Craig Kaplan</b> (Texas A&M University)	19
4:25-4:55	<i>"Visualizing human transcription elongation at single nucleotide resolution"</i> <b>L. Stirling Churchman</b> (Harvard Medical School)	20
4:55	Closing Remarks & BBA-Gene Regulatory Mechanisms Poster Awards	<b>HUB Auditorium</b>