

Telluride Workshop on Chromatin Structure and Dynamics

August 6-10, 2012

Talk 30 min + 15 min questions/discussion
Short talk 20 min + 10 min questions/discussion

Monday August 6, 2012

7:30-8:30 am Breakfast

Chromatin higher-order structure

8:30-9:15 am Mechanisms of heterochromatin assembly
Geeta Narlikar

9:15-10:00 am Theoretical modeling of chromatin structure and HP1-induced condensation
Andrew Spakowitz

15 min break

10:15-11:00 am Role of the nucleosome repeat length in chromatin higher-order folding:
developmental regulation and limiting the fiber compaction
Sergei Grigoryev

11:00-11:45 am Chromatin compaction: a modeling exploration of fiber heterogeneity and
linker histone influence
Tamar Schlick

11:45-12:30pm Histone tail rearrangements associated with H1 binding to nucleosomes
Jeff Hayes

12:30pm Group lunch

Afternoon Hiking/free time

Chromatin/nucleosome dynamics

7:00-7:45 pm Probing chromatin folding with force and torque
John van Noort

7:45-8:30 pm Single molecule studies of transcription factor occupancy
within nucleosomes
Michael Poirier

15 min break

8:45-9:30 pm Intermediate states of nucleosome opening revealed by single molecule FRET
and computer simulations
Jörg Langowski

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Tuesday August 7, 2012

Morning

Hiking/free time

Histone chaperones and variants

12:30-1:15 pm	The thermodynamics of chaperone-mediated nucleosome assembly Karolin Luger
1:15-2:00 pm	Histone transfer among chaperones Mair Churchill
	15 min break
2:15-3:00 pm	Structural basis for recognition of histone variants by intrinsically disordered chaperones Zheng Zhou
3:00-3:45 pm	Specifying centromere location with nucleosomes containing the histone H3 variant, CENP-A Ben Black
	15 min break
4:00-4:45 pm	Structural basis for the functional versatility of human nucleosomes containing histone variants Hitoshi Kurumizada
4:45-5:30 pm	A structural model for recognition of the CENP-A nucleosome by the kinetochore protein CENP-C Yawen Bai
6:00-7:30 pm	Town talk
7:45 pm -	Group dinner (voluntary, not covered by the registration fee)

Telluride Workshop on Chromatin Structure and Dynamics

Wednesday August 8, 2012

7:30-8:30 am Breakfast

Chromatin remodelers

8:30-9:15 am Structure and mechanism of the chromatin remodeling factor ISW1a
Tim Richmond

9:15-10:00 am Structural studies of chromatin remodeling enzyme SWR1
Andres Leschziner

15 min break

10:15-11:00 am Mechanism and architecture of the INO80 chromatin remodeler
Blaine Bartholomew

11:00-11:45 am What can the Chd1 remodeler do with nucleosomes? How targeting influences
the outcome of the remodeling reaction
Greg Bowman

11:45-12:15 pm Contributions of non-catalytic domains to nucleosome remodeling by SNF2h
John Leonard

Afternoon Hiking/free time

Chromatin modifiers and nucleosome recognition

6:00-6:45 pm Protein and DNA interactions of chromodomains
Sepideh Khorasanizadeh

6:45-7:30 pm Molecular mechanisms of epigenetic regulation
Tatiana Kutateladze

15 min break

7:45-8:30 pm Chromatin targeting and assembly of the mammalian Rpd3S/Sin3S co-repressor
complex
Ishwar Radhakrishnan

8:30-9:15 pm Anatomy of an intrinsically disordered protein: Characterization of the
structure and dynamics of MeCP2 using high speed-atomic force microscopy
Jeff Hansen

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Thursday August 9, 2012

Morning Hiking/free time

Chromatin modifiers and nucleosome recognition

2:00-2:45 pm	Nucleosome structure and recognition Song Tan
2:45-3:30 pm	Electrostatically controlled nucleosome-nucleosome stacking in hexagonal phases of ordered mononucleosomes Lars Nordenskiöld
	15 min break
3:45-4:30 pm	The role of inter-subunit interactions in activation of the SAGA deubiquitinating module Cynthia Wolberger
4:30-5:00 pm	Chemically modified histones: Ubiquitylation and beyond... Robert McGinty
6:00 pm - dark	TSRC Picnic

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Friday August 10, 2012

7:30-8:30 am Breakfast

Chromatin dynamics in vivo and nucleosome remodeling

8:30-9:15 am Stochastic expression and epigenetic memory of the HO promoter
Lu Bai

9:15-10:00 am Micromanipulation and imaging studies of chromatin assembly dynamics and
conformations in Xenopus egg extract
Jie Yan

15 min break

10:15-10:45 am A novel mechanism of nucleosome remodeling by ISWI-family enzymes
Sebastian Deindl

10:45-11:15 am Unzipping single DNA molecules to study nucleosome structure and remodeling
Ming Li

noon Conference ends

Telluride Workshop on Chromatin Structure and Dynamics

Participants

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