

## **Program of the 2022 (6<sup>th</sup>) Telluride Workshop on Chromatin Structure and Dynamics**

Organizers: Yawen Bai & Michael Poirier  
TSRC Hosts: Cindy Fusting (970) 708-5069; Mark Kozak, (970) 708-4426  
Location: Telluride Intermediate School, 725 West Colorado Ave Telluride CO 81435

### **Saturday, June 25, 2022**

5:00-6:30 pm Meet & Greet  
Location: Phoenix Bean (221 W Colorado Ave)

### **June 26-30, 2022**

(30 min talk + 15 min questions/discussions; questions are encouraged during talks)

### **Sunday, June 26, 2020**

7:30-8:45 am Breakfast at TSRC  
8:45-9:00 am Welcome (TSRC staff)

### **Structures of nucleosome recognition (I)**

9:00-9:45 am Structural studies of chromatin complexes  
**Song Tan**

9:45-10:30 am (TBD: something about structure of chromatin complexes)  
**Mario Halic**

15 min break

10:45-11:30 am Structural visualization of chromatin regulatory complexes using Cryo-EM  
**Yuan He**

Lunch on your own

Afternoon Hiking/free time

### **Structures of nucleosome recognition (II)**

7:30-8:15 pm Structural basis of paralog-specific KDM2A/B nucleosome recognition  
**Robert McGinty**

8:15-9:00 pm Structural insights into the recruitment and regulation of gene silencer PRC2  
**Vignesh Kasinath**

15 min break

9:00-9:45 pm Mechanism of acetylation of nucleosomal H4 by NuA4, the position matters  
**Zhucheng Chen**

**Monday June 27, 2022**

8:00-9:00 am            Breakfast

                                 Hiking/Free time

                                 Lunch on your own

**Nucleosome recognition by pioneer transcription factors**

1:00-1:45 pm            Mechanistic study of binding and nucleosome invasion by pioneer factors  
**Lucy Bai**

1:45-2:30 pm            Strategies for DNA readout in a chromatinized genome  
**Alicia Michael**

                                 15 min break

2:45-3:30 pm            Dynamics of transcription factor invasion into nucleosomes.  
**Michael Poirier**

3:30-4:15 pm            Structural mechanisms of native-nucleosome recognition by pioneer factors  
**Yawen Bai**

                                 15 min break

4:30-4:45 pm            Impact of torque and TF-binding on nucleosome investigated by molecular dynamics  
simulation and SAXS  
**Hidetoshi Kono**

4:45-5:30 pm            Gaining access: Dynamic mechanisms for entering and reshaping the chromatin  
landscape  
**Beat Fierz**

7:00-8:00 pm            Group dinner (place TBD)

## Tuesday June 28, 2022

8:00-9:00 am Breakfast

### Chromatin assembly and dynamics (I)

9:00-9:45 am Illuminating the dynamic remodeling of nucleosomes  
**Sebastian Deindl**

9:45-10:30 am A novel face of a single alpha helix in chromatin assembly  
**Mair Churchill**

15 min break

10:45-11:30 am Dissecting the complex interaction network of HP1 $\alpha$  with NMR spectroscopy  
**Galia Debelouchin**

Lunch on your own

Hiking/Free time

6:30-7:30 pm Town Talk  
Location: Telluride Transfer Warehouse (201 S Fir Street)  
Speakers: Moh El-Naggar, Ron Naaman, and Dave Waldeck

### Chromatin assembly and dynamics (II)

7:45-8:30 pm Is condensed chromatin an inaccessible and repressive structure?  
**Jeffery Hansen**

8:30-9:15 pm Structural dynamics of the nucleosome during transcription elongation  
**Hitoshi Kurumizaka**

15 min break

9:30-10:15 pm Single-molecule studies on chromatin fiber  
**John van Noort**

**Wednesday June 28, 2022**

8:00-9:00 Breakfast  
Lunch on your own  
Hiking/Free time

**Chromatin structure and dynamics**

1:00-1:45 pm Unraveling mitotic chromosome architecture by cryo-electron tomography  
**Maia Azubel**

1:45-2:30 pm In situ studies of chromatin organization by cryo-ET  
**Lu Gan**  
15 min break

2:45-3:00 pm Folding intermediates as a model for in vivo chromatin organization  
**Bing Zhang**

3:00-3:45 pm Super resolution imaging of chromatin structure and dynamics in health and disease.  
**Melike Lakadamyali**  
15 min break

4:00-4:45 pm Riding the tail of the dragon: do R-loops play a role in chromatin structure in vivo?  
**Yamini Dalal**

4:45-5:30 pm Chromosome structural dynamics for cell fate decision making  
**Jin Wang**

5:30-7:30 pm All-Telluride Science Picnic (Families Welcome!)  
Location: Tent behind Telluride Science Workshop Facility (725 W Colorado)

**Thursday June 30, 2022**

8:00-9:00 am                      Breakfast at TSRC

9:00 am                      Informal gather with directed discussion based on feedback during the meeting