

## 2024 (7<sup>th</sup>) Telluride Workshop on Chromatin Structure and Dynamics Aug 5-9, 2024

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 Telluride Science and Innovation Center  
 300 South Townsend St., Telluride, CO 81435

### Sun, Aug 4, 2024

|                |              |                                    |
|----------------|--------------|------------------------------------|
| 5:00 – 6:30 PM | Meet & Greet | Location: Alibi, 157 S. Fir Street |
|----------------|--------------|------------------------------------|

### Mon, Aug 5, 2024

|                |                      |  |
|----------------|----------------------|--|
| 7:30 – 8:45 AM | Breakfast            | Telluride Science and Innovation Center<br>300 South Townsend St., Telluride |
| 8:45 – 9:00 AM | Welcome (TSRC Staff) |  |

| Structures of nucleosome recognition |                   |  |
|--------------------------------------|-------------------|--|
| 9:00 – 9:45 AM                       | Song Tan          | Structural studies of a chromatin reader protein   |
| 9:45 – 10:30 AM                      | Rob McGinty       | Structural mechanisms of histone demethylation   |
| 10:30 – 10:45 AM                     | Break             |  |
| 10:45 – 11:30 AM                     | Mario Halic       | Structures of chromatin complexes (TFs, remodelers)  |
| 11:30 – 12:15 PM                     | Greg Bowman       | Should I open or should I close? How action of chromatin remodeler ATPases depend on activating segments |
|                                      | Lunch on your own |  |
|                                      | Hiking/free time  |  |

| Chromatin structure & assembly |                  |   |
|--------------------------------|------------------|---|
| 7:30 – 8:15 PM                 | Ruiming Xu       | Molecular mechanisms of replication-coupled nucleosome assembly |
| 8:15 – 9:00 PM                 | Zhucheng Chen    | Mechanism of nucleosome sensing by chromatin remodelers         |
| 9:00 – 9:15 PM                 | Break            |   |
| 9:15 – 10:00 PM                | Richard Kriwacki | Chromatin deregulation by fusion oncoprotein condensates        |

## Tues, Aug 6, 2024

|                |                   |   |
|----------------|-------------------|---|
| 8:00 – 9:00 AM | Breakfast         | Telluride Science and Innovation Center |
|                | Hiking/Free Time  |   |
|                | Lunch on your own |   |

| Nucleosome recognition by transcription factors |                    |   |
|---|--------------------|---|
| 1:00 – 1:45 PM                                  | Frank Pugh         | Genome-wide relationship of TF binding and the rotational and translational setting of nucleosomes            |
| 1:45 – 2:30 PM                                  | Lu Bai             | Mechanism of nucleosome invasion by transcription factors   |
| 2:30 – 2:45 PM                                  | Break              |   |
| 2:45 – 3:30 PM                                  | Yawen Bai          | How pioneer factors open chromatin in cell reprogramming  |
| 3:30 – 4:15 PM                                  | Seychelle Vos      | Structural analysis of a chromatin-transcription factor complex involved in genome organization               |
| 4:15 – 4:30 PM                                  | Break              |   |
| 4:30 – 5:15 PM                                  | Michael Poirier    | Revealing the energetics of chromatin compaction with DNA nanotechnology                                      |
|   |                    |   |
| 6:30 – 7:30 PM                                  | Song Tan           | Telluride Town Talk:<br>“Chromatin: Your DNA in a package”<br>Telluride Conference Center in Mountain Village |
|   | Dinner on your own |   |

## Wed, Aug 7, 2024

|                |           |   |
|----------------|-----------|---|
| 8:00 – 9:00 AM | Breakfast | Telluride Science and Innovation Center |
|----------------|-----------|---|

| Chromatin Dynamics |                   |  |
|--------------------|-------------------|--|
| 9:00 – 9:45 AM     | Sebastian Deindl  | Illuminating the regulation of gene expression at the single-molecule level                          |
| 9:45 – 10:30 AM    | Beat Fierz        | Imaging dynamic mechanisms of chromatin modification   |
| 10:30 – 10:45 AM   | Break             |  |
| 10:45 – 11:30 AM   | Ariel Kaplan      | Force spectroscopy sheds light on the structure and dynamics of chromatin                            |
| 11:30 – 12:15 PM   | John van Noort    | Unveiling chromatin organization with single-molecule approaches                                     |
|                    | Lunch on your own |  |
|                    | Hiking/free time  |  |
| 5:30 – 7:30 PM     | Picnic            | All-Telluride Science Picnic (Families Welcome)<br>Location: Telluride Science and Innovation Center |

## Thurs, Aug 8, 2024

|                |                  |   |
|----------------|------------------|---|
| 8:00 – 9:00 AM | Breakfast        | Telluride Science and Innovation Center |
|                | Hiking/Free Time |   |

| Chromatin structure and transcription |                    |  |
|---------------------------------------|--------------------|--|
| 1:00 – 1:45 PM                        | Hitoshi Kurumizaka | Structural dynamics of the nucleosome during transcription elongation  |
| 1:45 – 2:30 PM                        | Lucas Farnung      | Structural basis of chromatin transcription  |
| 2:30 – 2:45 PM                        | Break              |  |
| 2:45 – 3:30 PM                        | Lu Gan             | Molecular insights from in situ cryo-ET studies of eukaryotic chromatin  |
| 3:30 – 4:15 PM                        | Sergei Grigoryev   | Cryo-electron tomographic analysis of chromatin higher-order folding   |
| 4:15 – 4:30 PM                        | Break              |  |
| 4:30 – 5:15 PM                        | Sweta Sikde        | Decoding centromere dynamics during aging  |
| 7:30 – ? PM                           | Group Dinner       | LIZ Telluride, 200 W Colorado Ave unit 1 (junction of W Colorado Ave and S Fir St, across from New Sheridan Hotel) |

## Fri, Aug 9, 2024

|                |           |   |
|----------------|-----------|---|
| 8:00 – 9:00 AM | Breakfast | Telluride Science and Innovation Center |
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