

Biophysical Society 68<sup>th</sup> Annual Meeting  
Multiscale Genome Organization Subgroup Symposium  
Saturday February 10, 2024  
Philadelphia, Pennsylvania

**Subgroup Co-Chairs:** Catherine Musselman, University of Colorado Anschutz, USA and Jeff Wereszczynski, Illinois Institute of Technology, USA

**Symposium Chair:** Thomas Bishop, Louisiana Tech University, USA

**Symposium Time:** 8:30 AM - 12:30 PM EST

**Symposium Room:** 103C

**Subgroup Business Meeting:** 12:00 PM

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8:30 AM Opening Remarks

8:40 AM Mario Halic, St. Jude Research Hospital, USA

*Binding of Transcription Factors to Nucleosomes*

9:05 AM Emma Morrison, Medical College of Wisconsin, USA

*Deciphering the Dynamic Language of the Histone H3 Tail*

9:30 AM Student/Postdoc Talk: Anupam Mondal

*Nucleosome Breathing Facilitates the Search for Hidden DNA Sites by Pioneer Transcription Factors*

9:40 AM Student/Postdoc Talk: Ritika Gupta

*Tunable Single-Molecule DNA Mechanics Determines the Viscoelasticity of Chromatin Condensates*

9:50 AM Break

10:05 AM Maria Mills, University of Missouri, USA

*The C-terminal domains of Mycobacterial Type IA Topoisomerase modulate the enzyme's response to torsional strain in DNA*

10:30 AM Sofia Quinodoz, Princeton University, USA

*New Technologies for Probing Nuclear Organization and Function*

10:55 AM Alexandra Zidovska, New York University, USA

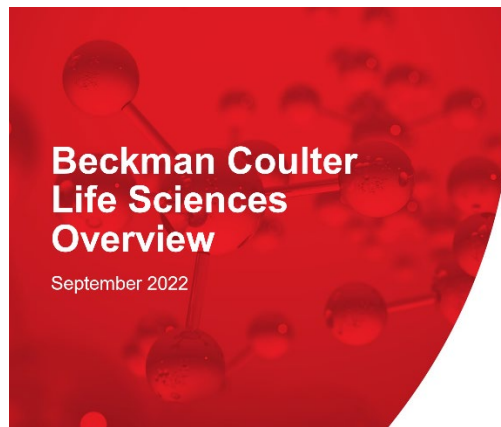
*Interphase Chromatin Undergoes a Local SOL-GEL Transition Upon Cell Differentiation*

11:20 AM Remo Rohs, University of Southern California, USA

*Biophysical Mechanisms of Protein-DNA Binding Revealed through Deep Learning Approaches*

12:00 PM Closing Remarks

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