

TSRC Workshop on Phase Separation in Biology and Disease

March 20-25, 2022

Venue: Ah Haa School for the Arts, 155 W Pacific Ave., Telluride, CO 81435, in The Launchpad Room (top floor).

Sunday evening, March 20

5-6:30 pm	MIXER at Phoenix Bean, 221 W. Colorado Ave. <i>Please be prepared for a COVID-19 Rapid Test (provided by TSRC).</i>
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Monday March 21

8:00-8:30 am	BREAKFAST at Baked in Telluride, 127 S Fir St, Telluride, CO 81435. <i>Please pick-up your \$50 gift card from TSRC at the Mixer, or at the venue.</i>
	Session chair: Richard Kriwacki
8:30-9:10 am	Shana Elbaum-Garfinkle, ASRC, CUNY (selbaumgarfinkle@gc.cuny.edu) "Tunable Properties and Dynamics of Biomolecular Condensates"
9:10-9:50 am	Christopher Reinkemeir, ETH Zurich (Christopher.Reinkemeier@bsse.ethz.ch) "Synthetic organelles to equip eukaryotic cells with orthogonal expanded genetic codes"
9:50-10:10 am	BREAK
10:10-10:50 am	Oliver Mueller-Cajar, Nanyang Technological University (cajar@ntu.edu) "First biochemical and structural insights into the CO ₂ -fixing Rubisco condensates of marine phytoplankton" Virtual
10:50-11:30 am	Joerg Gsponer, University of British Columbia (gsponer@msl.ubc.ca) "From autoinhibition to phase separation" Virtual

Tuesday March 22

8:00-8:30 am	BREAKFAST at Baked in Telluride
	Session chairs: Shasha Chong & Ben Sabari
8:30-9:10 am	Dragomir Milavanovic, DZNE (drago.milovanovic@gmail.com) "Phase separation at the synapse: a tale of synapsin, synuclein, and synaptic vesicles" Virtual
9:10-9:50 am	David Sanders, Princeton University (davidwinlandsanders@gmail.com) "Cracking the Electrostatic Code For A Speckle-Shattering Serine Stretch"
9:50-10:10 am	BREAK
10:10-10:50 am	Jeanne Stachowiak, University of Texas, Austin (jcstach@austin.utexas.edu) "Intrinsically disordered proteins and condensates shape and organize membranes" Virtual
10:50-11:30 am	Liam Holt, New York University (ljholt@gmail.com) "The effects of the crowded active intracellular environment on molecular transport and assembly"
12 – 5:00 pm	Free Time → Explore the outdoors
5:00 – 5:40 pm	Markus Zweckstetter, University of Gottingen; DZNE (mazw@nmr.mpibpc.mpg.de) "LLPS of Tau"
5:40 -6:20 pm	John F. Reilly, Nereid Therapeutics (jreilly@nereidtx.com) "Drug discovery for phase-separated targets"
6:20-7:00 pm	Huaiying Zhang, Carnegie Mellon University (huiyinz@andrew.cmu.edu) "Phase separation in telomere maintenance of ALT cancer"

Wednesday March 23

8:00-8:30 am	BREAKFAST at Baked in Telluride
	Session chairs: Diana Mitrea & Michael White
8:30-9:10 am	Shasha Chong, Caltech (schong@caltech.edu) “Transcriptional control by low-complexity domain interactions: a single-molecule perspective”
9:10-9:50 am	Benjamin Sabari, UT Southwestern (Benjamin.Sabari@UTSouthwestern.edu) “Selective partitioning of positive transcription regulators by IDR-IDR interactions”
9:50-10:10 am	BREAK
10:10-10:50 am	Serena Sanulli, Stanford University (ssanulli@stanford.edu) “Heterochromatin organization and dynamics”
10:50-11:30 am	Lucia Strader, Duke University (lucia.strader@duke.edu) “Transcription factor condensation to restrict auxin signaling in plants”
12 – 5:00 pm	Free Time → Explore the outdoors
5:00 – 5:40 pm	Bede Portz, Dewpoint Therapeutics (bede.portz@gmail.com) “Modulating TDP-43 condensates to treat ALS”
5:40 -6:20 pm	Rohit V. Pappu, Washington University at St. Louis (pappu@wustl.edu) “Reverse engineering the nucleolus from the bottom up”
6:20 - 7 pm	James Shorter, University of Pennsylvania (jshorter@penncmedicine.upenn.edu) “Countering deleterious phase transitions in ALS/FTD” Virtual

Thursday March 24

8:00-8:30 am	BREAKFAST at Baked in Telluride
	Session chair: Shana Elbaum-Garfinkle
8:30-9:10 am	Diana Mitrea, Dewpoint Therapeutics (dmitrea@dewpointtherapeutics.com) “Biomolecular condensates: the power of community in drug discovery”
9:10-9:50 am	Emily Sontag, Marquette (emily.sontag@marquette.edu) “Out the JUNQ: the Spatial Nature of Protein Quality Control”
9:50-10:10 am	BREAK
10:10-10:50 am	Stephanie Weber, McGill University (steph.weber@mcgill.ca) “Bacterial condensates under stress”
10:50-11:30 am	Michael R. White, Faze Medicines (mwhite@fazemed.com) “Condensate Drug Discovery at Faze Medicines”
12 – 5:00 pm	Free Time → Explore the outdoors
5:00 – 5:40 pm	Steven Boeynaems, Stanford University (sboeynae@stanford.edu) “Toxic peptides in Biology and Disease”
5:40 -6:20 pm	Richard Kriwacki, St. Jude Children’s Research Hospital (Richard.kriwacki@stjude.org) “Phase separation in tumor suppression and oncogenesis; two faces of a coin”
7 pm	Group Dinner @ Rustico Ristorante, 114 E Colorado Ave, Telluride, CO 81435 (Free for workshop participants; veg and non-veg items to be provided)

Friday March 25

8:00-8:30 am	BREAKFAST at Baked in Telluride Free Time / Safe travels!
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