

## RNA Dynamics: 2021

**Tuesday, July 13** (all times in Telluride time, Mountain Daylight US)

- 9:00 – 9:15 Welcome by Kathleen and TSRC folks  
9:15-10:15 Alan Chen  
10:15-11:15 Katja Petzold: *from small to complex: ribosomes and microRNAs*  
11:15-12:30 break  
12:30 – 13:30 Giovanni Bussi: *RNA structural dynamics combining molecular simulations and solution experiments*  
13:30 – 14:30 Tom Cheatham

### Wednesday, July 14

- 9:00 – 9:45 Martin Blackledge from the Protein Dynamics workshop: *NMR studies of highly dynamic viral replication complexes*  
9:45-10:30 Kathleen Hall: *RNA + protein = RNP*  
10:30 – 11:30 Nadine Schwierz: *Biomolecular simulations of RNA and metal cations: A highly charged task*  
11:30-12:30 Break  
12:30 – 13:30 Justin Lemkul: *Induced Electronic Polarization in RNA G-Quadruplexes and Tetraloop Folding*  
13:30- 14:30 Sarah Woodson: *Hfq tails*  
14:30 – 15:00 break  
15:00 – 16:00 Dave Case: *Simulations and refinement strategies for RNA crystals*  
(sorry, this is a long day)

### Thursday, July 15

- 9:00 – 9:45 Claus Seidel from the Protein Dynamics Workshop: *FRET-based integrative dynamic structural biology*  
9:45 – 10:45 Harald Schwalbe: *RNA tetraloops to RNA in SARS-CoV-2*  
10:45 – 11:45 Phil Bevilacqua: *The pKa of the O2' of small ribozymes: Dynamics and metal ion influences*  
11:45 – 13:00 Break  
13:00 – 14:00 Shi-Jie Shen  
14:00 – 15:00 Karissa Sanbonmatsu: *Structure-based simulations of RNA: riboswitches and ribosomes*  
Joint with Protein Dynamics

### Friday, July 16

- 9:00 – 10:00 Lois Pollack: *RNA triplexes: structure and signals*  
10:00 – 11:00 Christina Bergonzo: *Determining the conformational heterogeneity of a small oligonucleotide*  
11:00 – 12:00 Nils Walter: *Single molecule microscopy to the rescue: illuminating the RNA biology of the cell*  
12:00 – 13:00 break  
13:00 – 14:00 Ron Micura: *A natural riboswitch scaffold with self-methylation activity*  
14:00 – 15:00 Dave Mathews: *Secondary Structure Prediction: Accelerated Calculations and Modified Nucleotide Folding Thermodynamics Applied to Sars-CoV-2 and In Silico Sequence Design*  
15:00 – 15:30 break  
15:30 – 16:30 Ted Kwaku Dayie: *RNA Structure, interaction, and dynamics by NMR*