

Workshop Schedule

Sunday, July 27

17:00-18:30 TSIC Meet & Greet, Cash Bar
[Telluride Innovation Center](#), at 300 S Townsend St.

Monday, July 28

Location: Telluride Intermediate School

7:30–8:30 Breakfast at TSRC
8:50–9:00 Opening Comments

Session 1. Moderator: Akio Kitao

9:00–9:50	Megan Thielges	Dynamic substrate recognition of cytochrome P450s
9:50–10:40	Takahisa Yamato	Intramolecular thermal transport of proteins and energy dissipation at the protein-solvent interface
10:40–11:10	Break	
11:10–12:00	R. Brian Dyer	Acceleration of catalysis by photothermal excitation of a network of coupled motions in dihydrofolate reductase
12:00–	Free afternoon	
18:00-20:00	Informal dinner meet-up	Brown Dog Pizza 110 E. Colorado Ave

Tuesday, July 29

Location: Telluride Intermediate School

7:30–9:00 Breakfast at TSRC

Session 2. Moderator: Rafael Brüschweiler

9:00–9:50	Arthur G. Palmer III	Conformational dynamics govern protein function: Insights from NMR spectroscopy and molecular dynamics simulations
9:50–10:40	Saeko Yanaka	Unraveling antibody function: an integrative approach to structure, dynamics, and interaction

10:40–11:10	Break	
11:10–12:00	Francesca Massi	Probing the protein dynamics of profilin-1 and TDP43: function and dysfunction in two ALS-linked proteins
12:00–14:00	Lunch	
<i>Session 3.</i> Moderator: Takahisa Yamato		
14:00–14:50	Akio Kitao	Binding mechanisms and effects of intrinsically disordered regions of proteins
14:50–15:40	Xuhui Huang	Machine learning non-Markovian models of protein dynamics: from RNA polymerase inhibition to targeted protein degradation
18:30–19:15	Town Talk: Milan Delor , <i>Columbia University</i>	What If the Future of Computing Isn't Silicon? Telluride Conference Center, 580 Mountain Village Blvd

Wednesday, July 30

Location: **Samueli Room, Innovation Center**

7:30–9:00	Breakfast at TSRC
9:00–14:00	Free morning

Session 4. Moderator: Brian Dyer

9:00–9:50	Yasuhisa Mizutani	Origin of the difference in proton transport direction between inward and outward proton-pumping rhodopsins
9:50–10:40	Hikaru Kuramochi	Visualizing excitonic and primary structural dynamics in photoactive proteins by ultrafast coherent vibrational spectroscopy
10:40–11:10	Break	
11:10–12:00	Satoshi Takahashi	Investigation of the structure and dynamics of short and long RNA sequences using single-molecule FRET and fluorescence correlation spectroscopies

12:00–14:00 Lunch

Session 5. Moderator: Satoshi Takahashi

14:00–14:50 **Lalit Deshmukh** Dynamic interplay among ubiquitination and phase separation in a minimal reconstructed HIV-1 budding system

14:50–15:40 **Rafael Brüschweiler** K-Ras on the move on ns – ms dynamics by NMR and MD

15:40–16:10 Break

16:10–17:00 **Stephanie Wankowicz** How Proteins Optimize Binding: The Role of Pocket Rigidity and Distal Flexibility

18:00–20:00 TSIC Picnic

Thursday, July 31

Location: **Samueli Room, Innovation Center**

7:30–13:00 Free morning

Session 6. Moderator: Francesca Massi

13:00–13:50 **Ryota Iino** Rational engineering of high performance artificial molecular motors

13:50–14:40 **Toshifumi Mori** Investigating the roles of ATP in biomolecular environments: from energy source to hydrotrope

14:40–15:00 Workshop Wrap-Up & Committee Selection
