

Design of Light-Responsive and Light-Emitting Proteins

June 9 - June 12, 2025

Meeting Venue

<u>Telluride Intermediate School</u>, Room 1217 721 West Colorado Ave, Telluride, CO 81435

Local Telluride Science contacts

Mark Kozak, email: <u>mark@telluridescience.org</u>, cell: 970-708-4426 Sara Friedberg, email: <u>sara@telluridescience.org</u>, cell: 970-708-0622 Cindy Fusting, email: <u>cindy@telluridescience.org</u>, cell: 970-708-5069

Food: Grab-and-go breakfast will be available daily at the workshop location. Dinners and lunches are <u>NOT</u> included in registration.

Scientific program: Each talk is scheduled for 40 minutes, including 30 min. for presentations and 10 min. for Q&A. Interruptions and questions during talks are encouraged!

Sunday, June 8, 5:00 - 6:30 pm (Optional) Informal Meet & Greet at <u>Alibi</u> – 157 S. Fir Street

Monday, June 9, 9:00 am - 12:45 pm

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9:00-9:10 am	Organizers	Introduction and Welcome
9:10-9:50 am	Neil Hunter	Redesigning the Light Reactions of Photosynthesis
9:50-10:30 am	Dror Noy	Designing Chlorophyll-binding Proteins in the AI Era
10:30-10:45 am	Coffee break	
10:45-11:25 am	Nathan Ennist	Computational design of multi-chromophore protein assemblies

11:25-12:05 am	Elisabet Romero	Engineering Bio-Inspired Chromophore-Protein Assemblies for Solar Energy Conversion to Fuel
12:05-12:45 pm	Yang Yang	Photocatalyst-Enzyme Cooperativity in Radical Biocatalysis

Tuesday, June 10, 1:30 pm - 4:30 pm		
1:30-2:10 pm	Gabriela Schlau-Cohen	Properties of light-harvesting complexes in purple bacteria upon low light acclimation
2:10-2:50 pm	Sergei Savikhin	From photon to electron: Initial steps of charge-separation in PS1
2:50-3:10 pm	Coffee break	
3:10-3:50 pm	Thomas Renger	Modeling of energy transfer and optical spectra of photosynthetic complexes
3:50-4:30 pm	Mike Reppert	
6:30 pm	Town Talk	Telluride Conference Center in Mountain Village

Wednesday, June 11, 1:30 pm - 4:30 pm		
1:30-2:10 pm	Elisa Pieri	Modeling the titration of biological chromophores in complex environments
2:10-2:50 pm	Valerie Welborn	Predicting function in proteins with electric fields
2:50-3:10 pm	Coffee break	
3:10-3:50 pm	Sijia Dong	Computational design of photoenzymes
3:50-4:30 pm	Atanu Acharya	Modeling photoinduced conformational change using molecular dynamics
5:30 pm	Picnic	

Thursday, June 12, 9:00 am - 12:00 pm		
9:00-9:40 am	Lyudmila Slipchenko	Toward rational mutagenesis of photosynthetic proteins
9:40-10:20 am	Samer Gozem	

10:20-10:40 am	Coffee break	
10:40-11:20 am	Alice Walker	
11:20-12:00 pm	Igor Schapiro	Electric-field effects in photoreceptor proteins