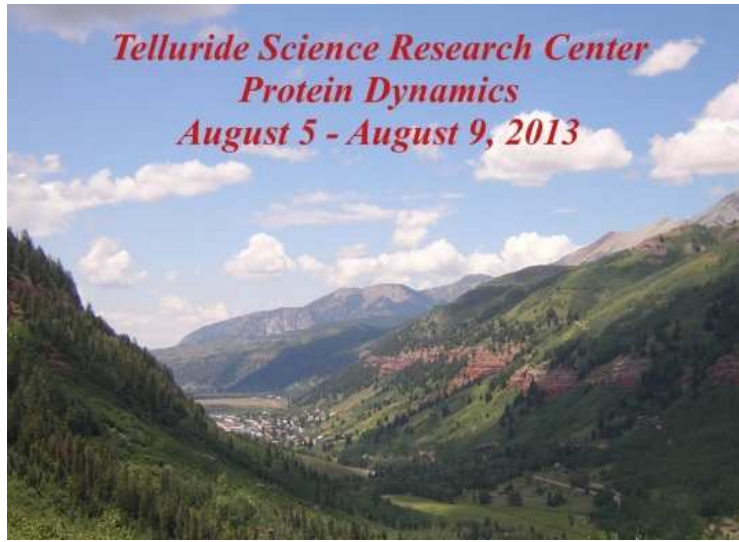


TSRC Protein Dynamics workshop 2013



Organisers:

Jasper van Thor – Imperial College London (j.vanthor@imperial.ac.uk)

Susan Marqusee – Berkeley University (marqusee@berkeley.edu)

Vincent J. Hilser – Johns Hopkins University (hilser@jhu.edu)

Kitao Akio- Tokyo University (kitao@iam.u-tokyo.ac.jp)

TSRC hosts:

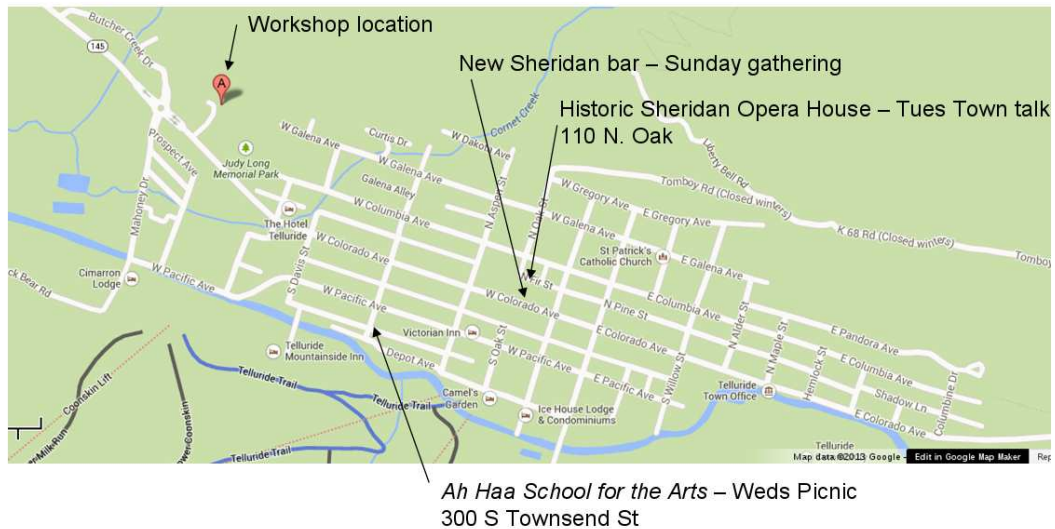
Nana Naisbitt (970-708-0004), Rory Sullivan (970-708-4542, 4)

*Location of the meeting – Telluride Intermediate School 725 W. Colorado Ave,
Telluride*

Sunday, 04 Aug 2013

18:00 – 21:00 Meet & Greet Reception
New Sheridan Bar, 231 W Colorado Ave

The New Sheridan offers TSRC scientists and their family & guests drink discounts and free games of pool. This is a place to gather to find friends and talk. Most people eat before or after arriving at the bar. There is not food at the bar, but there are many restaurants nearby.



Anfinrud, Philip - National Institutes of Health
Blackledge, Martin - Institut de biologie structurale
Champion, Paul - Northeastern University
Dror, Ron - D.E.Shaw Research
Fenimore, Paul - Los Alamos National Laboratory
Havenith, Martina - Bochum University
Hayashi, Shigehiko - Kyoto University
Hilser, Vincent - Johns Hopkins University
Jimenez, Ralph - JILA
Kataoka, Mikio - Nara Institute of Science and Technology
Kitao, Akio - The University of Tokyo
Lang, Matthew - Vanderbilt University
Loria, Joseph - Yale University
McDermott, Ann - Columbia University
Mizutani, Yasuhisa - Osaka University
Mulder, Frans - Aarhus University
Nishizaka, Takayuki - Gakushuin University
Palmer, Arthur - Columbia University
Sage, J Timothy - Northeastern University
van Thor, Jasper - Imperial College London
Taraphder, Srabani - Indian Institute of Technology
Tobias, Douglas - UC Irvine
Wand, Josh - University of Pennsylvania
Weik, Martin - Institut de Biologie Structurale
Yamato, Takahisha - Nagoya University
Yano, Junko - Lawrence Berkeley National Lab
Zanni, Martin - University of Wisconsin-Madison
Zhao, Yang - Nanyang Technological University
Zuiderweg, Erik - University of Michigan

Programme

Monday 05 Aug 1013

08:30 – 09:00 Breakfast at the TSRC meeting site for participants

09:00 – 09:10 Welcome and TSRC info

09:10 – 09:55 Josh Wand - University of Pennsylvania. “The dark energy of proteins comes to light and other stories...”

09:55 – 10:40 Fenimore, Paul - Los Alamos National Laboratory “Mossbauer effect, neutron scattering, and protein dynamics: Where do we stand?”

10:40 – 11:10 Coffee break

11:10 – 11:55 Matthew Lang - Vanderbilt University “Unfolding and translocation machinery of ClpXP”

11:55 – 12:40 Ron Dror - D.E. Shaw Research “Revealing structural dynamics of GPCR signaling through atomic-level simulation ”

12:40 – 13:25 Takahisha Yamato - Nagoya University “Role of reorganizable interactions between native residue contacts in the allosteric communication in proteins: A computational study by the inter-residue energy conductivity analysis”

13:25 – 19:00 Lunch break and free time

19:00 – 19:45 Vincent Hilser - Johns Hopkins University “Intrinsic Disorder, Conformational Fluctuations and Allostery”

19:45 – 20:30 Ralph Jimenez – JILA “Excited state dynamics of red fluorescent proteins”

20:30 – 21:15 Frans Mulder - Aarhus University “NMR spectroscopic investigation of pH-dependent PYP photocycle dynamics. ”

Tuesday 06 Aug 2013

08:30 – 09:00 Breakfast at the TSRC meeting site for participants

09:00 – 09:45 Junko Yano - Lawrence Berkeley National Lab “Taking Snapshots of Photosynthetic Water Oxidation: Towards Time-Resolved X-ray Spectroscopy and Crystallography”

09:45 – 10:30 Martina Havenith - Ruhr-Universität Bochum “Some like it cool”

10:30 – 11:15 Blackledge, Martin - Institut de biologie structurale “NMR studies of protein free energy landscapes in their free and bound forms ”

11:15 – 11:45 Coffee break

11:45 – 12:30 Jasper van Thor – Imperial College London “Ultrafast spectroscopy approaches to interrogate structural dynamics of fluorescent proteins and the photoactive yellow protein ”

12:30 – 13:15 J. Patrick Loria – Yale University “Millisecond motions in enzyme-catalyzed phosphoryl transfer and substrate selectivity ”

13:15 – 18:00 Lunch break and free time

18:00 Town Talk: Tuesday Nights 6pm at the Historic Sheridan Opera House at 110 N. Oak

Weds 07 Aug 2013

08:30 – 13:00 Free time including lunch break

13:00 – 13:45 Anfinrud, Philip - National Institutes of Health “ Picosecond Photobiology: Watching a Signaling Protein Function in Real Time via 150 Picosecond Time-Resolved X-ray Diffraction and Solution Scattering ”

13:45 – 14:30 Kataoka, Mikio - Nara Institute of Science and Technology “The mechanism of induced folding of Staphylococcal nuclease ”

14:30 – 15:00 Coffee Break

15:00 – 15:45 Paul Champion – Northeastern University “Measurement and theory of proton transport in Green Fluorescent Protein.”

15:45 – 16:30 Arthur G Palmer III - Columbia University “Protein dynamics from NMR spectroscopy and MD simulations ”

16:30 – 17:15 Martin Weik - Institut de Biologie Structurale “Proteins need it wet. Don't they ?”

18:00 - 21:00 TSRC Picnic at the Ah Haa School for the Arts at 300 S. Townsend

Thurs Aug 8

08:30 – 09:00 Breakfast at the TSRC meeting site for participants

09:00 – 09:45 J. Timothy Sage – Northeastern University “Modeling Bioenergetic Processes at the Atomic Scale”

09:45 – 10:30 Yang Zhao - Nanyang Technological University “Energy transfer dynamics in light-harvesting complexes of purple bacteria”

10:30 – 11:00 Coffee Break

11:00 – 11:45 Martin Zanni - University of Wisconsin-Madison “Kinetic barrier to amyloid fibril formation caused by an intermediate with a transient β -sheet”

11:45 – 12:30 Srabani Taraphder - Indian Institute of Technology “Dynamics of Conformational Fluctuation and Proton Transfer in Human Carbonic Anhydrase II ”

12:30 – 14:00 Lunch break

14:00 – 14:45 Ann McDermott - Columbia University “Conformational Exchange Coupled to Ion Binding in the Ion Channel KcsA ”

14:45 – 15:30 Akio Kitao - The University of Tokyo “Exploring protein conformational transition pathways with efficient molecular simulation method”

15:30 – 16:00 Coffee break

16:00 – 16:45 Doug Tobias - UC Irvine “Advances in the understanding of transmembrane voltage sensing from concerted scattering and molecular dynamics simulation studies”

16:45 – 17:30 Shigehiko Hayashi - Kyoto University” Crucial Role of Protein Flexibility in Enzymatic Catalysis”

17:30 – 18:15 Takayuki Nishizaka - Gakushuin University” Single-Molecule Imaging of Protein Conformations under Advanced Optical Microscopes”

18:15 - Free time & dinner break

Fri Aug 9

08:30 – 09:00 Breakfast at the TSRC meeting site for participants

09:00 – 09:45 Erik Zuiderweg - University of Michigan “Protein Dynamics from NMR assignment data?”

09:45 – 10:30 Yasuhisa Mizutani - Osaka University “Propagations of displacement and energy in proteins”

10:30 – 11:00 Coffee break

11:00 – 11:30 Selection Organisers Protein Dynamics 2015

12:00 – Meeting adjourns