Conference title: “Proton Transport in Biological & Model Systems”

Location: Telluride Science Research Center, Telluride, Colorado

Dates: July 29 – August 3, 2007

The Workshop was held at the advertised time and place, and was very successful. The final program is below.

Telluride Science Research Center Workshop on Proton Transport and Solvation in Biology and Model Systems

July 30-August 3, 2007

Pia Ådelroth (Stockholm University, Sweden) - PT in nitric oxide reductases
Noam Agmon (Hebrew University, Jerusalem) - a switchable PT wire in GFP
Fraser Armstrong (Oxford, U.K.) - hydrogenases
Sergei Balashov (U.C. Irvine) - sensory rhodopsin transduction
David Busath (Brigham Young U., Utah) - structural facilitation of PT in gramicidins
Peter Brzezinski (Stockholm University, Sweden) - surface proton conduction
Sam Cukierman (Loyola University Medical School) - ionic selectivity of water wires
Tom DeCoursey (Rush University, Chicago) - voltage sensitive proton channels
Bertrand Garcia-Moreno (Johns Hopkins) - determinants of $pK_a$ s of internal ionizable groups
Bob Gennis (U. Illinois) - cytochrome oxidase
Klaus Gerwert (Ruhr-Bochum, Germany) - time resolved FTIR of PT in proteins
Claudio Grosman (U. Illinois) - proton access and $pK_a$ s in the AChR channel
Marilyn Gunner (City College of New York) - calculating protonation states in proteins
Hemi Gutman (Tel Aviv, Israel) - dynamics of local and surface proton transfer
Sharon Hammes-Schiffer (Pennsylvania State University) - PT and H-atom transfer
Gerhard Hummer (NIH) - modeling proton pumping in cyt oxidase
Carola Hunte (Max Planck, Frankfurt) - the NhaA Na$^+$/H$^+$ antiporter
J. T. (Casey) Hynes (É.N.S., Paris and U Colorado-Boulder) - PT in proteins and aerosols
Roy Lancaster (Max Planck, Frankfurt) - fumarate reductase
Chris Moser (U. Pennsylvania) - cytochrome bc₁ complex and synthetic models
Armen Mulkidjanian (Moscow & Osnabrück) – PT in the Cyt bc₁ complex
Emad Tajkhorshid (U. Illinois) - aquaglyceroporin
Greg Voth (U. Utah, Salt Lake City) - simulations of PT and pumping in channels.
Steve White (UC Irvine) - a voltage-sensor water pore
Colin Wraight (U. Illinois) - electron-coupled PT in reaction centers

There was considerable interaction between participants, and one mark of success was the decision to schedule a follow-up Workshop in 2010 at the same location. Tom Haines and Marilyn Gunner will be in charge of that meeting.

The DOE funds were used to support the following individuals, totaling $5000 for domestic travel.

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