



Scientific Meeting:

Experimental and Computational Approaches to Understanding Membrane Assemblies and Permeation

July 30-31, 2007

University of Illinois at Urbana-Champaign

Confirmed Speakers Include:

Steve Boxer, Stanford University

C. Jeffrey Brinker, University of New Mexico

Michael Colvin, University of California, Merced

Eric Jakobsson, University of Illinois

Eduardo Perozo, University of Chicago

Susan Rempe, Sandia National Labs

H. Larry Scott, Illinois Institute of Technology



User Forum:

nanoHUB User Forum

August 1, 2007

University of Illinois at Urbana-Champaign

Usage scenarios presented by invited faculty, industry, and students. nanoHUB technical overviews of new features and contribution mechanisms. Community presentations on nanoHUB usage for research, dissemination, and education. Software training on the nanoHUB development and deployment technologies.

Summer School:

Multiscale Theory, Simulation, and Reality at the Nano-Bio Interface

nanoHUB.org – reaching thousands of users with scientific simulations

August 2-10, 2007

University of Illinois at Urbana-Champaign

Nano-Bio Computing Workshop (8/2-8/6): Continual access to high-performance computing capabilities in a user-friendly environment. Hands-on tutorials, individualized mentoring, and continual opportunities for discussion in electronic structure, classical molecular dynamics, Monte Carlo, and systems dynamics will be available. Practical and theoretical approaches for linking simulations at different time and length scales into an integrated multiscale approach.

Software and Computing Strategies and Implementation (8/7-8/10): Use of nanoHUB-supported tools for individual and collaborative software development, dissemination, and education and training. Particular topics include Rapture tools and environment for software development, version control, parallelization, scripting, remote collaboration, and tools to facilitate materials development for education and training. Goal is for participants to either launch a new project or significantly advance an existing project during the workshop.

Organizers:

University of Illinois: Narayan Aluru, Eric Jakobsson, Umberto Ravaioli, Dave Mattson
Network for Computational Nanotechnology: Gerhard Klimeck, Michael McLennan

Sponsors:

Network for Computational Nanotechnology @ UIUC (NCN@UIUC) • National Center for Design of Biomimetic Nanoconductors (NCDBN) • Materials Computation Center (MCC) • National Center for Supercomputing Applications (NCSA) • SCCNE-UIUC • Center for Cellular Mechanics (CCM)



Images: Water in nanotube modeled using Gromacs on the nanoHUB; Structure of staphylococcal α -hemolysin: Song, et. al, Science (274); Gramicidin pore modeled using BioMOCA on the nanoHUB; NCSA building: Courtesy of the National Center for Supercomputing Applications (NCSA) and the Board of Trustees of the University of Illinois

Application and more information at www.uiuc.edu/goto/nanobio