# Brain Science at the Interface of Biological, Physical and Mathematical Sciences, Computer Science, and Engineering: Analysis of New Opportunities

### March 4-6, 2007 Westin Arlington Gateway Hotel

#### Agenda

#### Sunday, March 4

6:00-8:00 PM Reception (hors d'oeuvres, cash bar)

Westin, Pinzimini Restaurant, Private Rooms, 1st Floor

#### Monday, March 5

Westin, Fitzgerald Ballroom D&E, 2<sup>nd</sup> Floor

8:00-8:15 AM Welcome

Arden Bement, Director, NSF

Kathie Olsen, Deputy Director, NSF

8:15-8:30 AM Goals and Plan for the Workshop

Chris Wood, Santa Fe Institute

8:30-9:30 AM Perspectives on Opportunities in Neuroscience

Neuroethological and Developmental Mechanisms: Molecular and

Cellular Approaches

Eve Marder, Brandeis University

Organization of Behavior: Emerging Principles

Partha Mitra, Cold Spring Harbor Laboratory

Plasticity, Learnin, g and Development

Jay McClelland, Stanford University

Signal Processing and its Development in the Brain

Emery Brown, Massachusetts Institute of Technology

9:30-10:00 AM Break

10:00-10:45 AM Perspectives on Opportunities in Neuroscience

Measuring the Brain: From Synapse to Thought Jonathan Sweedler, University of Illinois

Cognitive Systems Across Levels of Analysis in Brain Systems

Marcus Raichle, Washington University *Biomimetics and the Neuron/Silicon Interface* 

Ted Berger, University of Southern California

10:45-12:30 PM	Breakout Sessions: Homework Presentations and Discussion <i>Room assignments to be announced</i>
12:30-2:00 PM	Working Lunch
2:00-3:30 PM	Breakout Sessions: Identify, Analyze, and Prioritize Opportunities
3:30-4:00 PM	Break
4:00-6:00 PM	Breakout Sessions: Identify, Analyze, and Prioritize Opportunities
6:30-8:30 PM	Reception (hors d'oeuvres, cash bar)  NSF Atrium/Front Page Grill

## Tuesday, March 6

8:30-10:00 AM	Westin, Fitzgerald Ballroom D&E, 2 <sup>nd</sup> Floor Prepare for Discussion with NSF Leadership
10:00-12:00 PM	Discussion Arden Bement, Director, NSF Kathie Olsen, Deputy Director, NSF NSF Assistant Directors
12:00-1:00 PM	Working Lunch
1:00-3:00 PM	Breakout Sessions: Report writing
3:00-3:30 PM	Break
3:30-5:00 PM	Read-back: Identify, Analyze, and Prioritize Opportunities
5:00 PM	Adjourn