



# FRONTIERS IN MEMBRANE PROTEIN STRUCTURAL DYNAMICS

**May 3<sup>rd</sup> and 4<sup>th</sup>, 2012**

**University of Chicago Gleacher Center**  
450 North Cityfront Plaza Drive  
Chicago, Illinois 60611  
312.464.8787

## **Thursday May 3, 2012**

8:00-8:30 Registration and Breakfast

### **Welcome & Introduction**

8:30-8:45 Eduardo Perozo, University of Chicago

### **NMR Approaches to Membrane Protein Motion in the ns- $\mu$ s Range**

8:45-8:50 Merritt Maduke, Stanford University, *Session Chair*

8:50-9:15 Marc Baldus, Utrecht University

9:15-9:40 Dorothee Kern, Brandeis University

9:40-10:05 Katherine Henzler-Wildman, Washington University at St. Louis

10:05-10:20 Coffee Break

### **Engineering/Methods to investigate Membrane Protein Dynamics**

10:20-10:25 Steve Kent, University of Chicago, *Session Chair*

10:25-10:50 Francis Valiyaveetil, Oregon Health & Science University

10:50-11:15 Christopher Ahern, University of British Columbia

11:15-11:40 Anthony Kossiakoff, University of Chicago

11:40-12:05 Benoît Roux, University of Chicago

### **12: 05-1:30 Lunch and Posters**

### **Computational Approaches to Transmembrane Signaling**

- 1:30-1:35 Klaus Schulten, University of Illinois, Urbana-Champaign, *Session Chair*
- 1:35-2:00 Ivet Bahar, University of Pittsburgh
- 2:00-2:25 Emad Tajkhorshid, University of Illinois, Urbana-Champaign
- 2:25-2:50 Wonpil Im, University of Kansas
- 2:50-3:10 Coffee break

### **Alternative Approaches to Membrane Protein Expression and Stability**

- 3:10-3:15 Shohei Koide, University of Chicago, *Session Chair*
- 3:15-3:40 Volker Dötsch, Goethe University
- 3:40-4:05 Brian Fox, University of Wisconsin, Madison
- 4:05-4:30 James Bowie, University of California, Los Angeles
- 4:30-4:50 Coffee break

### **Dynamics of Ion-Protein Interactions**

- 4:50-4:55 Francisco Bezanilla, University of Chicago, *Session Chair*
- 4:55-5:20 Martin Zanni, University of Wisconsin, Madison
- 5:20-5:45 Miguel Holmgren, NINDS
- 5:45-6:10 José Faraldo-Gómez, Max Planck Institute of Biophysics
- 6:10- Free evening

## **Friday May 4, 2012**

### **Mechanistic Paradigms of Membrane Protein Function**

- 8:30-8:35 Claudio Grosman, University of Illinois, Urbana-Champaign, *Session Chair*
- 8:35-9:00 Doug Rees, California Institute of Technology
- 9:00-9:25 Ming Zhou, Columbia University
- 9:25-9:50 Anthony Auerbach, University at Buffalo, New York
- 9:50-10:10 Coffee Break

### **Conformational Coupling in Secondary Transporters**

- 10:10-10:15 Robert Nakamoto, University of Virginia, *Session Chair*

10:15-10:40 Hassane Mchaourab, Vanderbilt University  
10:40-11:05 Olga Boudker, Cornell University  
11:05-11:30 Geoffrey Chang, Scripps Research Institute  
11:30-11:40 Closing Remarks  
11:40-1:00 Lunch