

# Ion Channels, Receptors and Calcium Signaling: *From Structure to Disease*

9th Annual Cell & Developmental Biology Symposium  
Department of Molecular & Cell Biology, UCB

March 22, 2014

- 9:00-9:15 Diana Bautista and Polina Lishko, University of California, Berkeley  
Welcome
- Ehud Isacoff, University of California, Berkeley  
Opening Remarks
- Session I: Calcium Dynamics**
- 9:15-9:55 David Clapham, Harvard Medical School  
"Ion channels in primary cilia"
- 9:55-10:35 Richard Lewis, Stanford School of Medicine  
"Molecules in motion: Trapping and gating of store-operated calcium channels"
- 10:35-10:55 BREAK
- Session II: Sensory Biology**
- 10:55-11:35 Marla Feller, University of California, Berkeley  
"Cellular mechanisms underlying spontaneous patterned activity in developing neural circuits"
- 11:35-12:15 Jeffrey Holt, Harvard Medical School  
"Are TMCs The Mechanotransduction Channels of the inner ear?"
- 12:15- 1:30 BREAK (lunch not provided)
- Session III: TRPV Channels**
- 1:30-2:10 David Julius, University of California, San Francisco  
"TRP channels of the pain pathway: Connecting physiology to atomic structure"
- 2:10-2:50 Rachelle Gaudet, Harvard University  
"Structural insights into TRPV channel function in health and disease"
- 2:50-3:05 BREAK
- Session IV: Structural Insights into Channel Modalities**
- 3:05-3:45 Dan Minor, University of California, San Francisco  
"Structural and chemical biological insights into channel function"
- 3:45-4:25 William Catterall, University of Washington  
"Structural basis for function of voltage-gated Na<sup>+</sup> and Ca<sup>2+</sup> channels"
- 4:30-4:40 Diana Bautista and Polina Lishko, University of California, Berkeley  
Closing Remarks and Acknowledgements
- 4:40-5:45 RECEPTION