

**Workshop on Quantifying Cell Dynamics, January 23, 2015**  
*Genentech Hall, UCSF, 600 16h St. San Francisco 94158*

**8:00 – Breakfast Refreshments**  
At Registration table at N-114

**9:00**  
**Wallace Marshall, UCSF**  
*Welcome and introduction*

**9:10 Orion Weiner, UCSF**  
*New tools for unlocking cell polarity*

**9:30 Sophie Dumont, UCSF**  
*Mechanics of chromosome segregation*

**9:50 Manu Prakash, Stanford**  
*Flatland: Can magnets teach us something about organismic behavior?*

**10:10 Dan Fletcher, UC Berkeley**  
*Constrained assembly of biological structures*

10:30 – 11:00 BREAK

**11:00 Torsten Wittmann, UCSF**  
*Understanding microtubule and cell dynamics by quantitative live cell microscopy*

**11:20 Arpita Upadhyaya, U of Maryland**  
*Cytoskeletal forces during immune cell activation*

**11:40 Steve Altschuler, UCSF**  
*Developmental algorithms for fly brain wiring*

12:00 – 1:30 LUNCH BENTO BOXES

**1:30 Dyche Mullins, UCSF**  
*The mechano-biochemistry of life*

**1:50 Adriana Dawes, Ohio State**  
*Polarity initiation and maintenance in the early *C.elegans* embryo*

**2:10 Raj Bhatnagar, UCSF**  
*Identifying network topologies with 2D perturbations*

**2:30 Susanne Rafelski, UC Irvine**  
*Quantitative analysis of mitochondrial network morphology and function in budding yeast*

2:50 – 3:10 BREAK

**3:10 Khuloud Jaqaman, UT Southwestern**  
*Multi-scale linkages between single-molecule integrin dynamics and cell protrusion*

**3:30 Otger Campas, UCSB**  
*Measuring cellular forces within living embryonic tissues*

**3:50 Lani Wu, UCSF**  
*From cancer cell heterogeneity to drug response*

**4:10 Tatyana Makushok, UCSF**  
*Correlating membrane domain dynamics with cell growth in fission yeast*

4:30 – 5:00 BREAK

**5:00 Jian-qiu Wu, Ohio State**  
*Counting protein molecules in live cells*

**5:20 Jan Liphardt, Stanford**  
TBA

5:40 PRE-DINNER BREAK

6:00 DINNER– served in **S-201** (second floor)

**7:30 Brainstorming break-out group session:**  
Room S201: **what tools are we missing for analyzing cell dynamics?**  
Room N114: **what tools should be more widely used in cell dynamics?**

8:00 Breakout groups meet to report on conclusions

9:00 Meeting ends