



**Research Articles**

1. **Chan Y-HM**, Marshall WF. "Organelle Size Scaling of the Budding Yeast Vacuole Is Tuned by Membrane Trafficking Rates." *Biophysical Journal* (2014) 106: 1986-1996.
2. Arigovindan M, Fung J, Elnatan D, Mennella V, **Chan, Y-HM**, Pollard M, Branlund E, Sedat JW, Agard DA. "High-resolution restoration of 3D structures from extreme low exposure widefield fluorescence images." *Proc Natl Acad Sci USA* (2013) 110: 17344-17349.
3. Rafelski SM, Viana MP, Zhang Y, **Chan Y-HM**, Thorn KS, Yam P, Fung JC, Li H, Costa LdF, Marshall WF. "Mitochondrial Network Size Scaling in Budding Yeast is Achieved in the Bud at the Expense of the Mother." *Science* (2012) 338: 822-824.
4. **Chan Y-HM**, Marshall WF. "How cells know the size of their organelles." *Science* (2012) 337:1186-1189.
5. **Chan Y-HM**, Marshall WF. "Threshold-free method for three-dimensional segmentation of organelles." *Proc. SPIE* (2012) 8225: 822529.
6. **Chan, Y-HM**, Marshall WF. "Scaling properties of cell and organelle size." *Organogenesis* (2010) 6:88-96.
7. Chung M, Lowe R, **Chan Y-HM**, Ganesan PV, Boxer SG. "DNA-tethered membranes formed by giant vesicle rupture." *J. Struct. Biol.* (2009) 168:190-199.
8. **Chan Y-HM**, van Lengerich B, Boxer SG. "Effects of linker sequences on vesicle fusion mediated by lipid-anchored DNA oligonucleotides." *Proc. Natl. Acad. Sci. USA* (2009) 106, 979-984.
9. **Chan Y-HM**, van Lengerich B, Boxer SG. "Lipid-anchored DNA mediates vesicle fusion as observed by lipid and content mixing." *Biointerphases* (2008) 3, FA17-FA21.
10. **Chan Y-HM**, Lenz P, Boxer SG. "Kinetics of DNA-mediated docking reactions between vesicles tethered to supported lipid bilayers." *Proc. Natl. Acad. Sci. USA* (2007) 104, 18913-18918.
11. **Chan, Y-HM**, Boxer SG. "Model membrane systems and their applications." *Curr. Opin. Chem. Bio.* (2007) 11, 581-587.
12. Lenz P, Johnson JM, **Chan Y-HM**, Boxer SG. "Tension induced pore formation and leakage in adhering vesicles." *Euophys. Lett.* (2006) 75, 659-665.
13. Yoshina-Ishii C, **Chan Y-HM**, Johnson JM, Kung LA, Boxer SG. "Diffusive dynamics of vesicles tethered to a fluid supported bilayer by single-particle tracking." *Langmuir* (2006) 22, 5682-2689.
14. **Chan Y-HM**, Schweiss R, Werner C, Grunze M. "Electrokinetic characterization of oligo- and poly-(ethylene glycol)-terminated self-assembled monolayers on gold and glass surfaces." *Langmuir* (2003) 19, 7380-7385.

**Awards and Fellowships**

|           |  |
|-----------|--|
| 2013      | Postdoctoral Teaching Fellowship, UCSF                   |
| 2010-2012 | Ruth L. Kirchstein National Research Service Award (NIH) |
| 2009      | Herbert W. Boyer Postdoctoral Fellowship                 |
| 2001-2002 | DAAD German Exchange Fellowship                          |
| 1997      | Magna cum laude, Harvard University                      |

**Invited Presentations**

|      |   |
|------|---|
| 2014 | Center for Systems and Synthetic Biology, Scientific Advisory Board Meeting |
| 2013 | American Society for Cell Biology Annual Meeting, Minisymposium             |
| 2013 | Santa Clara University  |
| 2013 | qBio Winter Conference, contributed session                                 |

2012 Center for Systems and Synthetic Biology Meeting  
 2012 UCSF Cell Biology Retreat  
 2011 American Society for Cell Biology Annual Meeting, Building the Cell Workshop  
 2011 Physical and Computational Approaches to Cancer Biology Workshop  
 2010 Bay Area Yeast and Other Fungi Symposium  
 2007 Physical and Chemical Aspects of Molecular Biology, NSF Workshop

### **Teaching Experience**

#### *Lead instructor*

2015 BIOL351 Experiments in Cell & Molecular Biology, SFSU  
 2015 BIOL350 Cell Biology

#### *Co-instructor and Teaching assistant*

2013 Discussion leader for Mechanisms, Methods, and Malignancies, UCSF  
 2013 Lab developer and Teaching Assistant for Biological Light Microscopy, UCSF  
 2011-2013 Lecturer and Teaching Assistant for Microscopy Boot Camp, UCSF  
 2010 Teaching Assistant for Physiology Course, Marine Biological Lab, Wood's Hole  
 2006 Course co-developer, Chemistry 31B, Stanford University  
 2003 co-Head Teaching Assistant, Chemistry 31, Stanford University  
 2003 Teaching Assistant, Chemistry 176, Stanford University  
 2003 Teaching Assistant, Chemistry 135, Stanford University  
 2002 Teaching Assistant, Chemistry 32, Stanford University

#### *Other experience and training*

2014 Participant in HHMI SEPAL Summer Teaching Institute

### **Mentoring**

2015 Mentor for Nancy Tran, Saba Sohail, Loreana Reyes and William Chadwick, SFSU  
 2013 Mentor for Edwin Rosado, Amgen Scholars Summer Research Program  
 2012 Mentor for Daniel Schraeder, summer internship  
 2010 Mentor for Margaux Kreitman, summer internship  
 2007 Mentor for Kevin Sante, Stanford Summer Research Training Program

### **Professional service**

#### *Advising*

2015 Advisor for Cell and Molecular Biology majors, SFSU

#### *Society Membership*

ongoing American Society for Cell Biology, Biophysical Society

#### *Conference Organizing*

2012 Bay Area Yeast and Other Fungi Symposium

### **Community Outreach**

2011 Bridges to Baccalaureate Speaker, San Francisco State University  
 2004 Judge, Eastside Science Fair  
 2003 Mentor to Jason Ahmad and Marquis Pickrom, Eastside Science Fair

**References**

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**Alex Merz, Ph.D.**

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