# Curriculum Vitae

# **PERSONAL DATA**

Name: Adam Frost Birth Place: Utah

Citizenship: United States

# **EDUCATION**

<u>Years</u>	<u>Degree</u>	Institution (Area of Study)
2009 – 2011	Postdoctoral Fellow	University of California, San Francisco (Cellular and Molecular Pharmacology) San Francisco, CA Mentor: Jonathan S. Weissman
2000 – 2009	M.D.	Yale University School of Medicine (Medical Scientist Training Program), New Haven, CT
2003 – 2008	Ph.D.	Yale University (Interdepartmental Neuroscience Program), New Haven, CT Mentors: Pietro De Camilli and Vinzenz M. Unger
1996 – 2000	B.S.	Brigham Young University (Honors Biochemistry) Provo, UT

# **ACADEMIC HISTORY**

University of California, San Francisco Department of Biochemistry and Biophysics

09/01/2014 Hire, Tenure Track, Assistant Professor

# University of Utah Department of Biochemistry

07/01/2011 Hire, Tenure Track, Assistant Professor

# PROFESSIONAL EXPERIENCE

# **Full Time Positions**

2014 - Present	Assistant Professor, Department of Biochemistry and Biophysics
2014 1165611	. 1
	University of California, San Francisco, CA
2014 - Present	Adjunct Assistant Professor, Department of Biochemistry
	University of Utah School of Medicine, Salt Lake City, UT
2011 - 2014	Assistant Professor, Department of Biochemistry and Huntsman Cancer Institute,
	University of Utah School of Medicine, Salt Lake City, UT
2009 - 2011	Post-Doctoral Scholar, University of California, San Francisco, CA
	Mentor: Jonathan Weissman, PhD
2000 - 2009	Medical Scientist Training MD/PhD Program, Yale University School of Medicine, CT
	Mentors: Vinzenz Unger, PhD and Pietro De Camilli, MD
1997 - 2000	Undergraduate Research Intern, Brigham Young University, UT
	Mentor: David Busath, MD

## **HONORS AND AWARDS**

2015	
2017	Chan Zuckerberg Biohub Investigator
2016	Howard Hughes Medical Institute Faculty Scholar
2016	American Asthma Foundation Scholar
2015	Herbert Boyer Junior Faculty Endowed Chair
2013	NIH Director's New Innovator
2013	Searle Scholar
2009	Howard Hughes Medical Institute Fellow of the Life Sciences Research Foundation
2009	Yale University School of Medicine Dissertation Award & Farr Scholarship Lecture
2008	Sara and Frank McKnight Fellowship, UT Southwestern Medical Center (Declined)
2006	Epilepsy Foundation Pre-Doctoral Research Training Fellowship
2006	Invited Student Delegate to the 45th Annual International Academy of Achievement
2004	The Milton C. Winternitz Prize in Pathology, Yale School of Medicine
2000	NIH/NIGMS, Medical Scientist Training Program Grant GM-07205
2000	Cum laude in Honors Chemistry and Biochemistry, Brigham Young University
1999	Harry S. Truman Scholarship, Finalist
1999	Barry M. Goldwater Scholarship for Math, Science and Engineering
1995	Most Outstanding Inorganic Chemistry Undergraduate Student Award
1994	Mangum-Lewis Undergraduate Scholarship (full support)

# **Reviewer Experience**

Reviewer for eLife, Science, Nature Press Group: Nature, Nature Cell Biology, Nature Communications, Nature Structural and Molecular Biology, Nature Methods, European Molecular Biology Organization (EMBO); Proceedings of the National Academy of Sciences (PNAS), Cell Press: Cell, Developmental Cell, Molecular Cell, Cell Reports, Biophysical Journal, Current Biology; Journal of Cell Biology, Journal of Molecular Biology, Current Opinion in Structural Biology, Nucleic Acids Research.

# **UNIVERSITY COMMUNITY ACTIVITIES**

#### University of California, San Francisco

University of California, San Francisco	
2014 - Present	Faculty Member, Summer Research Training Program (SRTP) Selection and
	Placement Committee, chaired by Carol Gross.
2014 - 2015	Faculty Member, Junior Faculty Search Committee, chaired by Wallace Marshall

#### University of Utah Health Sciences Level

University of Utah	Treatti Sciences Level
2012 - Present	Faculty Member, Core Research Facilities, Cell Imaging/Fluorescence Microscopy
	Facility, Oversight Committee
2012 - Present	Faculty Member, Research Microscopy Facility, Center for Advanced Microscopy,
	Oversight Committee
2012 - Present	Faculty Chair, Core Research Facilities, Electron Microscopy Core Facility,
	Oversight Committee

#### University of Utah Programs, Centers & Institutes

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2011 - 2013	Member, Biological Chemistry Graduate Program, Admissions committee
2013 - 2014	Chair, Biological Chemistry Graduate Program, Admissions committee

## **FUNDING**

**Active Grants** 

9/30/13 - 6/30/18 Toward Atomic Resolution of Membranes and Membrane-Associated Machines

1DP2GM110772-01

Principal Investigator: Adam Frost

Direct Costs: \$1,500,000 Total Costs: \$2,345,000

NIH/NIGMS New Innovators High Risk High Reward Director's Program

Role: Principal Investigator

9/01/14 - 8/31/17 Structure and Function of the Exocyst Complex

2R01GM068803-10

Principal Investigator: Mary Munson (UMASS)

Direct Costs: \$219,992 (Frost Lab), Total Costs: \$347,587 (Frost Lab, UCSF)

NIH/NIGMS Role: Co-PI

6/01/16 - 5/30/18 Structural Basis of Heritable Human Asthma and Other Sphingolipid Diseases

2016 AAF Scholar Award (16-0052; Frost)

Direct Costs: \$300,000 (Frost Lab) American Asthma Foundation Role: Principal Investigator

11/01/16 - 10/31/21 Function Follows Form: Structural Cell Biology

HHMI Grant #55108523

2016 Howard Hughes Medical Institute Faculty Scholar Award (Frost)

Direct Costs: \$500,000 (Frost Lab)

Howard Hughes Medical Institute Faculty Scholar Program

Role: Principal Investigator

11/01/16 - 10/31/21 CAT Tail Synthesis and Quality Control in Pathogens: New Biological and

Therapeutic Concepts

2017 CZ Biohub Investigator Program (Frost)

Direct Costs: \$750,000 (Frost Lab)

Chan Zuckerberg BioHub Role: <u>Principal Investigator</u>

8/01/17 - 7/31/22 Structural Biology Center for HIV/Host Interactions in Trafficking and Assembly

2P50GM082545-06

Principal Investigator: Wesley I. Sundquist

Direct Costs: \$150,000 Total Costs: \$237,000 (Frost)

National Institute of General Medical Sciences

Role: Project 1 Structural Biology of ESCRT-III leader (Frost, Investigator)

#### **Past Grants**

7/01/15 – 12/31/16 New Concepts for Understanding and Treating Neurodegenerative Disease

New Frontiers Research Program, Direct Costs: \$150,000 (Frost Lab)

Sandler Foundation and UCSF Program for Breakthrough Biomedical Research

Role: Principal Investigator

7/01/13 - 6/30/16 Structural and Functional Characterization of the Ribosome Quality Control Complex

13SSP218

Principal Investigator: Adam Frost

Direct Costs: \$300,000, Total Costs: \$300,000

Searle Scholars Program

Role: Principal Investigator

9/01/14 - 8/31/16 Structure of srGAP Proteins

BSF Grant #2013310

Principal Investigators: Adam Frost, Yarden Opatowsky

Direct Costs: \$120,000, Total Costs: \$120,000 Binational United States – Israel Science Foundation

Role: Principal Investigator

2/01/13 - 6/30/14 Structural Biology Center for HIV/Host Interactions in Trafficking and Assembly

2P50GM082545-06

Principal Investigator: Wesley I. Sundquist

Direct Costs: \$162,000 Total Costs: \$162,000 (Frost)

National Institute of General Medical Sciences

Role: Collaborative Development Grant Awardee (Frost, <u>Investigator</u>)

1/01/12 - 12/31/12 Cell cycle control by a novel membrane protein complex of the Golgi

Principal Investigator: Adam Frost

Direct Costs: \$28,000 Total Costs: \$28,000

University Of Utah Research Foundation Seed Grant

Role: Principal Investigator

7/01/11 - 6/30/12 Cell Response and Regulation Cancer Center Support Grant

Principal Investigator: Adam Frost

Direct Costs: \$21,000 Total Costs: \$21,000

Huntsman Cancer Institute Role: <u>Principal Investigator</u>

3/01/11 - 6/30/11 Acquisition of a Field Flow Fractionation Chromatography System

Principal Investigator: Adam Frost

Direct Costs: \$89,608 Total Costs: \$89,608 University of Utah Vice President for Research

Role: Principal Investigator

12/01/10 - 6/30/11 Fellowship - Adam Frost

Principal Investigator: Adam Frost

Direct Costs: \$56,000 Total Costs: \$56,000

Life Sciences Research Foundation

Role: Principal Investigator

#### TEACHING RESPONSIBILITIES/ASSIGNMENTS

#### **Course Lectures**

2016 – present	Course Director, Tetrad Program, Cell Biology
2015 – present	Lecturer, iPQB Biophysics Program, Structural Biology
2014 - 2016	Lecturer, Tetrad Program, Cell Biology
2012 - 2014	Instructor, BLCHM C 6400: Genetic Engineering, University of Utah, 2 credit hours
2012 - 2014	Lecturer, M BIOL 6480: Cell Biology I, 1.5 credit hours
2011 - 2014	Instructor, BIO C 7020: Biochem Research in Progress, University of Utah
2011 - 2014	Instructor, MBIOL 6100: Seminar Journal Club, University of Utah

### **Small Group Teaching**

2015 – present	Medical School, M3 Molecular Biology
2011 - 2014	Medical School, Third Year Internal Medicine Clerkship Facilitator and Lecturer

# **Trainee Supervision**

Post-Doctoral Scho	<u>plars</u>
2011 - 2013	Supervisor, Marc Elgort, University of Utah. Ph.D. University of Utah, 2010
	Project: Cell cycle regulation by a tumor suppressive complex of the golgi complex <i>Trainee's Current Career Activities:</i> Research Scientist, Associated Regional and University Pathologists, Salt Lake City, UT
2012 - 2015	Supervisor, Peter Shen, University of Utah. Ph.D. Brigham Young University, 2011 Project: Structure and function of the ribosome quality control complex Trainee's Current Career Activities: Assistant Professor, Department of Biochemistry, University of Utah School of Medicine, Salt Lake City, UT
2015 - 2017	Co-Supervisor, Nicole Schirle, University of California, San Francisco Ph.D. Scripps Research Institute, 2014 Project: The structure and function of the ER Membrane protein Complex (EMC) Trainee's Current Career Activities: Research and Design Scientist, Pfizer, Rinat Campus of South San Francisco, CA
2011 - Present	Supervisor, Mingyu Gu, University of Utah. Ph.D. University of Utah, 2010 Project: The role of the ESCRT pathway in nuclear envelope integrity
2016 - Present	Supervisor, Henry Nguyen, University of California, San Francisco Ph.D. Yale University, 2015 Project: Membrane remodeling mechanisms and the ESCRT pathway
2016 - Present	Supervisor, Alexander Von Appen, University of California, San Francisco Ph.D. European Molecular Biology Laboratory (EMBL), 2015 Project: The role of the ESCRT pathway nuclear envelope integrity
2016 - Present	Supervisor, Halil Aydin, University of California, San Francisco Ph.D. University of Toronto, 2016 Project: The structural basis of sphingolipid homeostasis
2017 - Present	Supervisor, Ming Sun, University of California, San Francisco Ph.D. Columbia University, 2017 Project: Ribosome-associated Quality Control
<u>Masters</u> 2011 - 2012	Supervisor, Seth Lilavivat, University of Utah.  B.S. Georgia Institute of Technology, 2008  Project: A novel endo-lysosome homeostasis pathway  Trainee's Current Career Activities: Staff scientist, BioFire, Salt Lake City, UT
PhD/Doctorate 2011 - Present	Supervisor, Raghav Kalia, University of Utah. B.S. Hans Raj College, Delhi University, 2007

M.S. Jawaharlal Nehru University, 2010

Project: The structural basis of mitochondrial membrane remodeling

2013 - Present Supervisor, Nathaniel Talledge, University of Utah.

B.S. University of Minnesota, Twin Cities, 2011

Project: Structural inhibition of dynamin-mediated membrane fission by BAR-

domain containing proteins

2013 - Present Co-Supervisor, Valentin Romanov, University of Utah.

B.S. University of South Australia, 2011

Project: Microfluidic control of size-, content-, and leaflet lipid-specific vesicles

2015 - Present Supervisor, Lillian Kenner, UCSF

B.S. University of California, Santa Cruz, 2007

Project: The structure and function of the exocyst complex

2016 - Present Supervisor, Isabel Johnson, UCSF

B.S. University of Wisconsin, Madison, 2015

Project: Structural basis of membrane protein biogenesis

2016 - Present Supervisor, Paul Thomas, UCSF

B.S. University of Michigan, 2012 Project: Regulated mitochondrial fission

2016 - Present Supervisor, Conor Howard, UCSF

B.S. University of California, Berkeley, 2014 Project: Ribosome-associated Quality Control

#### **Graduate Student Committees**

2011 - 2014	Member, Jason Nielson, University of Utah, PhD/Doctorate Committee
2011 - 2014	Member, Niladri Sinha, University of Utah, PhD/Doctorate Committee
2011 - 2014	Chair, Raghav Kalia, University of Utah, PhD/Doctorate Committee
2011 - 2014	Member, Yan Gao, University of Utah, PhD/Doctorate Committee
2011 - 2014	Member, John Schell, University of Utah, PhD/Doctorate Committee
2011 - 2012	Chair, Seth Lilavivat, University of Utah, PhD/Doctorate Committee
2012 - 2014	Member, Zhizhou Ye, University of Utah, PhD/Doctorate Committee
2012 - 2014	Member, T. Cameron Waller, University of Utah, PhD/Doctorate Committee
2012 - 2014	Member, Edward Hujber, University of Utah, PhD/Doctorate Committee
2012 - 2015	Member, Shigeki Watanabe, University of Utah, PhD/Doctorate Committee
2012 - 2013	Member, Brandon Henrie, University of Utah, PhD/Doctorate Committee
2013 - Present	Chair, Nathaniel Talledge, University of Utah, PhD/Doctorate Committee
2013 - 2014	Member, Kristofor Olson, University of Utah, PhD/Doctorate Committee
2013 - 2013	Member, James Robertson, University of Utah, PhD/Doctorate Committee
2013 - 2013	Member, Sven Miller, University of Utah, PhD/Doctorate Committee
2013 - 2017	Member, Kyle Trettin, University of Utah, PhD/Doctorate Committee
2013 - 2017	Member, Kirsten Khoe, University of Utah, PhD/Doctorate Committee
2013 - Present	Member, Valentine Romanov, University of Utah, PhD/Doctorate Committee
2015 - Present	Member, Jessica Sherry, UCSF, PhD/Doctorate Committee
2015 - Present	Member, Jordan Tsai, UCSF, PhD/Doctorate Committee

2015 - Present Chair, Lillian Kenner, UCSF, PhD/Doctorate Committee 2015 - Present Member, Aditya Anand, UCSF, PhD/Doctorate Committee 2015 - Present Member, Eugene Palovcak, UCSF, PhD/Doctorate Committee 2015 - Present Member, Evan Green, UCSF, PhD/Doctorate Committee Member, Valentina Garcia, UCSF, PhD/Doctorate Committee 2015 - Present 2015 - Present Member, Adrienne Stormo, UCSF, PhD/Doctorate Committee 2016 - Present Chair, Isabel Johnson, UCSF, PhD/Doctorate Committee Chair, Paul Thomas, UCSF, PhD/Doctorate Committee 2016 - Present 2016 - Present Chair, Conor Howard, UCSF, PhD/Doctorate Committee 2017 - Present Member, Rachel Brunetti, UCSF, PhD/Doctorate Committee

#### PEER-REVIEWED PUBLICATIONS

- Osuna, B.A., Howard, C.J., Kc, S., **Frost, A.\***, Weinberb, D.E.\* (2017) In vitro analysis of RQC activities provides insights into the mechanism and function of CAT tailing. **Elife** Jul 18;6 pii: e27949. PMID 28718767 PMCID: in progress
- 2. Kostova, K.K., Hickey, K.L., Osuna, B.A., Hussmann, J.A., **Frost, A.**, Weinberg, D.E.\*, Weissman, J.S.\* (2017) CAT-tailing as a fail-safe mechanism for efficient degradation of stalled nascent polypeptides. **Science** Jul 28;357(6349):414-417. PMID: 28751611 PMCID: in progress
- 3. Gu, M., LaJoie, D., Chen, O.S., Von Appen, A. Ladinsky, M.S., Michael J. Redd, M.J., Nikolova, L. Bjorkman, P.J., Sundquist, W.I.\*, Ullman, K.S.\*, **Frost, A.\*** (2017) LEM2 recruits CHMP7 for ESCRT-mediated nuclear envelope closure in fission yeast and human cells. **Proc Natl Acad Sci USA** Feb 27. PMCID: PMC5358359
- 4. Antonny, B., Burd, C., De Camilli, P., Chen, E., Daumke, O., Faelber, K., Ford, M., Frolov, V.A., Frost, A., Hinshaw, J.E., Kirchhausen, T., Kozlov, M.M., Lenz, M., Low, H.H., McMahon, H., Merrifield, C., Pollard, T.D., Robinson, P.J., Roux, A., Schmid, S. (2016) Membrane fission by dynamin: what we know and what we need to know. EMBO J., Sep 26. PMCID: PMC5090216
- Hwang, J., Ribbens, D., Raychaudhuri, S., Cairns, L., Gu, H., Frost, A., Urban, S., Espenshade.P.J. (2016) A Golgi rhomboid protease Rbd2 recruits Cdc48 to cleave yeast SREBP. EMBO J., March 2016 Sep 21 PMCID: PMC5090219
- Heider, M.R., Gu, M. Duffy, C.M., Mirza, A.M., Marcotte, L.L., Walls, A.C., Farrall, N., Hakhverdyan, Z., Field, M.C., Rout, M.P., Frost, A., Munson, M. (2016) Subunit Connectivity, Assembly Determinants, and Architecture of the Yeast Exocyst Complex. Nature Structure and Molecular Biology Jan 23(1):59-66. PMCID: PMC4752824
- McCullough J., Clippinger, A.K., Talledge, N. Skowyra, M.L., Saunders, M.G., Naismith, T.V., Colf, L.A., Afonine, P.A., Arthur, C., Sundquist, W.I.\*, Hanson, P.I.\*, Frost A.\* (2015).
   Structure and Membrane Remodeling Activity of ESCRT-III Helical Polymers. Science 350, 1548–51. Co-corresponding authors. PMCID: PMC46847693.
- 8. Shen, S.S., Park, P., Qin, Y., Li, X., Parsawar, P., Larson, M.H., Cox, J., Cheng, Y. Lambowitz, A.L., Weissman, J.S.\*, Brandman, J.\*, **Frost**, **A.\*** (2015) Rqc2p and 60S ribosomal subunits mediate mRNA-independent elongation of nascent chains. **Science** 347(6217), 75-78 \*Cocorresponding authors. PMCID: PMC4451101
- 9. Koirala S, Guo Q, Kalia R, Bui HT, Eckert DM, **Frost A\***, Shaw JM\*. (2013). Interchangeable adaptors regulate mitochondrial dynamin assembly for membrane scission. **Proc Natl Acad Sci USA**, *110*(15), E1342-51. \*Co-corresponding authors. PMCID: PMC3625255
- 10. Brandman O, Stewart-Ornstein J, Wong D, Larson A, Williams CC, Li GW, Zhou S, King D, Shen PS, Weibezahn J, Dunn JG, Rouskin S, Inada T, Frost A\*, Weissman JS.\* (2012). A ribosome-bound quality control complex triggers degradation of nascent peptides and signals translation stress. Cell, 151(5), 1042-54. \*Co-corresponding authors. PMCID: PMC3534965

- 11. **Frost A\***, Elgort MG, Brandman O, Ives C, Collins SR, Miller-Vedam L, Weibezahn J, Hein MY, Poser I, Mann M, Hyman AA, Weissman JS. (2012). Functional repurposing revealed by comparing S. pombe and S. cerevisiae genetic interactions. **Cell**, *149*(6), 1339-52. (Cover) \*Corresponding author. PMCID: PMC3613983
- 12. Mim C, Cui H, Gawronski-Salerno JA, **Frost A**, Lyman E, Voth GA, Unger VM. (2012). Structural basis of membrane bending by the N-BAR protein endophilin. **Cell**, *149*(1), 137-45. PMCID: PMC3319357
- 13. Guerrier S, Coutinho-Budd J, Sassa T, Gresset A, Jordan NV, Chen K, Jin WL, **Frost A**, Polleux F. (2009). The F-BAR domain of srGAP2 induces membrane protrusions required for neuronal migration and morphogenesis. **Cell**, *138*(5), 990-1004. PMCID: PMC2797480
- 14. **Frost A**, Unger VM, De Camilli P. (2009). The BAR domain superfamily: membrane-molding macromolecules. **Cell**, 137(2), 191-6. PMCID: PMC4832598
- 15. **Frost A**, Perera R, Roux A, Spasov K, Destaing O, Egelman EH, De Camilli P, Unger VM. (2008). Structural basis of membrane invagination by F-BAR domains. **Cell**, *132*(5), 807-17. PMCID: PMC2384079
- 16. Roux A, Uyhazi K, **Frost A**, De Camilli P. (2006). GTP-dependent twisting of dynamin implicates constriction and tension in membrane fission. **Nature**, *441*(7092), 528-31. PMID: 16648839
- 17. Lax I, Wong A, Lamothe B, Lee A, **Frost A**, Hawes J, Schlessinger J. (2002). The docking protein FRS2alpha controls a MAP kinase-mediated negative feedback mechanism for signaling by FGF receptors. **Mol Cell**, *10*(4), 709-19. PMID: 12419216
- \*Cole CD, \***Frost AS**, Thompson N, Cotten M, Cross TA, Busath DD. (2002). Noncontact dipole effects on channel permeation. VI. 5F- and 6F-Trp gramicidin channel currents. **Biophys J**, 83(4), 1974-86. \*these authors contributed equally to this work. PMCID: PMC1302287
- Jackson ME, Frost AS, Moghaddam B. (2001). Stimulation of prefrontal cortex at physiologically relevant frequencies inhibits dopamine release in the nucleus accumbens. J Neurochem, 78(4), 920. PMID: 11520912

# **INVITED PUBLICATIONS**

- 1. Mcbride H. & **Frost, A** (2016) Double agents for mitochondrial division. **Nature**, PMID: 27880759 DOI: 10.1038/nature20482
- 2. **Frost A**. (2011). Membrane trafficking: decoding vesicle identity with contrasting chemistries. **Curr Biol**, *21*(19), R811-3.
- 3. **Frost A**, De Camilli P, Unger VM. (2007). F-BAR proteins join the BAR family fold. **Structure**, 15(7), 751-3.

#### **BOOK CHAPTERS**

- 1. **Frost A**, Unger VM, De Camilli P. (2009) Boomerangs, Bananas and Blimps: Structure and Function of F-BAR Domains in the Context of the BAR Domain Superfamily. <a href="http://www.landesbioscience.com/curie/chapter/3985/">http://www.landesbioscience.com/curie/chapter/3985/</a>
  <a href="http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?book=eurekah∂=ch3985">http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?book=eurekah∂=ch3985</a>.
- In *The Pombe Cdc15 Homology Proteins* (Pontus Aspenström). Landes Biosciences 2. Kalia, R., Talledge, N.T., and **Frost, A.** (2015) Structural and Functional Studies of Membrane
- 2. Kalia, R., Talledge, N.T., and **Frost, A.** (2015) Structural and Functional Studies of Membrane Remodeling Machines. **Methods in Cell Biology**, Volume 128, ISSN 0091-679X. <a href="http://dx.doi.org/10.1016/bs.mcb.2015.02.007">http://dx.doi.org/10.1016/bs.mcb.2015.02.007</a>

## **PRESENTATIONS**

#### **International Meeting Presentations (Not Abstracts, Not Posters)**

- 2017 American Society for Biochemistry and Molecular Biology, COMBIO, Adelaide, Australia (Plenary Lecture)
- 2017 EMBO Endocytosis Conference, Warsaw, Poland
- 2017 American Society for Biochemistry and Molecular Biology, Structures and Functions of the Ribosome-associated Quality control Complex (RQC), Chicago, Il, USA
- 2016 American Society of Cell Biology, Non-Canonical ESCRT Structures and Functions Mini-Symposium, San Francisco, CA USA (Symposium co-chair and Speaker)
- 2016 3rd<sup>th</sup> Annual BioMembranes Symposium, Max Planck Society in Berlin-Dahlem, Berlin, Germany
- 2016 "Hey What's the Big Idea?" Symposium for the Center for Cell and Genome Science, Salt Lake City, UT USA (Keynote)
- 2016 Mitochondrial Dynamics, Keystone Sympoisum, Steamboat Springs, CO USA
- 2015 How Do Large GTPases of the Dynamin Family Fission Membranes, Les Treilles, France
- 2015 Gordon Research Conference, Molecular Membrane Biology, NH USA
- 2015 Membrane Protein Structures Meeting (MPS 2015), Argonne National Lab, Chicago, IL USA
- 2014 Molecular Basis for Membrane Remodeling and Organization, Roscoff of Brittany, France
- 2014 Microscopy of Infectious Disease Agent Symposia (MIDAS), NIH Hamilton MT, USA
- 2014 Structural Biology Related to HIV/AIDS, NIH, Bethesda, MD USA
- 2014 Gordon Research Conference, Lysosomes and Endocytosis, NH USA
- 2014 American Society for Biochemistry and Molecular Biology, San Diego, CA USA
- 2014 Keystone Symposium, Aging: Pushing the Limits of Cellular Quality Control, Steamboat Springs, CO USA
- 2013 Synaptic Vesicle Biogenesis, Janelia Farm Research Campus, Virginia USA
- 2013 Structural Biology Related to HIV/AIDS, NIH, Bethesda, MD
- 2012 3rd Annual Delaware Membrane Protein Symposium, Newark, DE
- 2011 Sixth International Fission Yeast Meeting. Harvard University, Boston, MA USA
- 4th International Conference on Structural Analysis of Supramolecular Assemblies by Hybrid Methods. Lake Tahoe, CA, USA
- 2007 1st International Conference on PCH/F-BAR Proteins: Adaptor Proteins for Macromolecualr Complexes. Schloβ Waldthausen, Mainz, Germany
- 2007 61st Annual Meeting of the Symposium of the Society of General Physiologists. Membrane Biophysics of Fusion, Fission, and Rafts in Health and Disease. Marine Biological Laboratory. Woods Hole, MA, USA

#### **Invited/Visiting Professor Presentations**

#### International

- 2017 Max-Delbrück Center for Molecular Medicine, Berlin, Germany
- 2016 Monash University, Melbourne, Australia
- 2016 University of Queensland, Brisbane, Australia
- 2015 12<sup>th</sup> Annual Horizons in Molecular Biology, Max Plank Institute for Biophysical Chemistry, Göttingen, Germany
- 2014 Bioimaging at the Nanoscale. Oregon Health Science and the FEI Living Labs 1<sup>st</sup> Annual Workshop and Conference. Portland, OR USA
- 2013 Department of Biochemistry Seminar Series, University of Geneva, Geneva, Switzerland
- 2013 1st Annual Workshop on Cryo-Techniques for Electron Microscopy. Department of Nanochemistry, Instituto Italiano Di Tecnologia, Genova, Italy

### **National**

- 2017 Structural Biology Related to HIV/AIDS, NIH/NIGMS, Bethesda, MD, USA (Speaker)
- 2017 Annual Signaling and Cellular Regulation (SCR) Symposium, University of Colorado, Boulder CO USA (Keynote)
- 2017 Department of Cell Biology, Johns Hopkins School of Medicine, Baltimore, USA
- 2017 Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, Boston, USA
- 2017 Division of Physical Biosciences, Lawrence Berkeley National Laboratory, Berkeley, USA
- 2016 Bay Area Membrane Traffic (BATS) Symposium, University of California, Berkeley, Berkeley, CA USA (Keynote)
- 2016 Department of Biochemistry and Molecular Biology, University of Chicago, Chicago, USA
- 2016 Department of Molecular Biology, Princeton University, Princeton, NJ USA
- 2016 Department of Cell Biology, University of Texas, Southwestern Medical Center, Dallas, Texas USA
- 2015 Department of Molecular Biology, Brigham Young University, Provo, UT USA
- 2015 Department of Biochemistry, University of Washington, School of Medicine, Seattle, WA USA
- 2015 Department of Cell Biology, Symposium to Honor James Jamieson, Yale University School of Medicine, New Haven, CT USA
- Department of Genetics, Cell & Developmental Biology, and Institute for Regenerative Medicine Seminar Series at the Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA USA
- 2015 Structural and Quantitative Biology (SQB) Seminar Series, University of California, Berkeley, Berkeley, CA USA
- 2015 Department of Biochemistry, Weill Medical College of Cornell University, NYC, NY USA
- 2014 Department of Biomolecular Chemistry, University of Wisconsin-Madison, Madison, WI USA
- 2014 Department of Biochemistry & Molecular Pharmacology, University of Massachusetts, Worchester, MA USA
- 2014 Department of Molecular Biosciences, Northwestern University, Evanston, IL USA
- 2013 Weill Institute for Cell and Molecular Biology, Cornell University, Ithaca, NY
- 2012 Department of Cell Biology & Molecular Biology Seminar Series, University of Maryland, College Park, MD
- 2011 Department of Cell Biology, Yale University, New Haven, CT

#### OTHER SCHOLARLY ACTIVITY

#### **Other Scholarly Activities**

2008 "Structural Basis of Bilayer Deformation by Membrane-Associated Scaffolds."

Yale University, Department of Molecular Biophysics & Biochemistry,

Interdepartmental Neuroscience Program

Thesis Advisor: Vinzenz M. Unger, Ph.D., Thesis Co-Advisor: Pietro De Camilli, M.D.

Thesis Committee: Fred Sigworth, Ph.D., Steven Strittmatter, M.D. Ph.D.