

CURRICULUM VITAE

NAME Adam Frost	POSITION TITLE Herbert Boyer Junior Faculty Endowed Chair Assistant Professor
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EDUCATION & TRAINING: List in reverse chronological order each degree program, postdoctoral research experience, medical training experience, fellowship experience, and other training experience. Include month/year started and completed, the degree, the institution and location, the research mentor(s), if appropriate, and your field of study.

START MONTH/ YEAR	END MONTH/Y EAR	DEGREE (<i>if applicable</i>)	INSTITUTION AND LOCATION	TRAINING MENTOR	SCIENTIFIC DISCIPLINE
01/2009	06/2011	Post- doctoral	University of California, San Francisco, San Francisco CA	Jonathan S. Weissman	Genetics, Systems Biology
09/2000	01/2009	MD / PhD	Yale University, New Haven CT	Vinzenz M. Unger & Pietro De Camilli	Structural Biology Cell Biology
09/1995	05/2000	BS	Brigham Young University, Provo UT	David M. Busath	Biophysics

PROFESSIONAL POSITIONS: In reverse chronological order, list positions held since completing education and other training experiences. The last position will be your first post-training professional position entered in the Eligibility Section.

START MONTH/ YEAR	END MONTH /YEAR	POSITION TITLE	DEPARTMENT	INSTITUTION AND LOCATION
09/2014	Present	Assistant Professor	Biochemistry & Biophysics	University of California, San Francisco, San Francisco CA
07/2011	09/2014	Assistant Professor	Biochemistry	University of Utah, Salt Lake City UT

Significant Professional Activities Include advisory panels, editorial boards, consulting, honors, awards, etc.

Honors and Awards

2015	Herbert Boyer Junior Faculty Endowed Chair
2013	NIH Director's New Innovator Award
2013	Searle Scholars Award
2009	Howard Hughes Medical Institute Fellow of the Life Sciences Research Foundation
2009	Yale University School of Medicine Dissertation Award & Farr Scholarship Lecture
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	Barry M. Goldwater Scholarship for Math, Science and Engineering

Reviewer Experience

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

University Community Activities

University of California, San Francisco

2015 - Present Summer Research Training Program (S RTP) Selection and Placement Committee

University of Utah Health Sciences Level

2012 - 2014 Faculty Member, Core Research Facilities, Cell Imaging/Fluorescence Microscopy Facility, Oversight Committee

2012 - 2014 Faculty Member, Research Microscopy Facility, Center for Advanced Microscopy, Oversight Committee

2012 - 2014 Faculty Chair, Core Research Facilities, Electron Microscopy Core Facility, Oversight Committee

University of Utah Programs, Centers & Institutes

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

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

Peer-Reviewed Publications

Primary Articles

1. 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. *Co-corresponding authors. PMID: PMC4451101
 2. 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. PMID: PMC3625255
 3. 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. PMID: PMC3534965
 4. **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. *Corresponding author. PMID: PMC3613983
 5. 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. PMID: PMC3319357.
 6. 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. PMID: PMC2797480
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7. **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
8. 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
9. 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
10. *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. *Authors contributed equally to this work. PMCID: PMC1302287
11. 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

Review Articles

1. **Frost A**. (2011). Membrane trafficking: decoding vesicle identity with contrasting chemistries. **Curr Biol**, 21(19), R811-3. PMID: 21996503
2. **Frost A**, Unger VM, De Camilli P. (2009). The BAR domain superfamily: membrane-molding macromolecules. **Cell**, 137(2), 191-6. PMID: 19379681
3. **Frost A**, De Camilli P, Unger VM. (2007). F-BAR proteins join the BAR family fold. **Structure**, 15(7), 751-3. PMID: 17637334

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. <http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?book=eurekah&ch3985>. In *The Pombe Cdc15 Homology Proteins* (Pontus Aspenström). Landes Biosciences.

Active Grants

- 1) Structural and Functional Characterization of the Ribosome Quality Control Complex
13SSP218
PI: Adam Frost
Searle Scholars Program
07/01/13 – 06/30/16
 - 2) Toward Atomic Resolution of Membranes and Membrane-Associated Machines
DP2GM110772
PI: Adam Frost
NIH Directors New Innovator Program
10/01/13 - 06/30/18
 - 3) Structural and Functional Characterization of the srGAP Family of Proteins
BSF2013310
PIs: Adam Frost / Yarden Opatowsky
BSF United States – Israel Binational Science Foundation
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07/01/14 – 06/30/17

4) Structure and Function of the Exocyst Complex

2-R01-GM068803-10

PI: Mary Munson / Co-PI: Adam Frost

NIH/NIGMS

WA00228620/RFS2015073 Subaward (Frost)

09/01/14 - 06/30/18

5) New Concepts for Understanding and Treating Neurodegenerative Disease

New Frontier Research Award 2013846

PI: Adam Frost

Sandler Foundation Program for Breakthrough Biomedical Research

07/07/2015 – 06/30/16
