Martha S. Cyert

Dr. Nancy Chang Professor, Department of Biology
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Personal Statement

Dr. Martha Cyert, Chair of the Biology Department and the Dr. Nancy Chang Professor of Biology at Stanford University directs a research program that studies Ca^{2+}-dependent signal transduction. The Cyert lab focuses on calcineurin, the highly conserved Ca^{2+}/calmodulin-regulated protein phosphatase that plays critical roles in muscle, immune and neural cells. Dr. Cyert's research established conserved aspects of substrate recognition and dephosphorylation by calcineurin and showed that SLiMs (short linear interaction motifs), low affinity, degenerate sequences which occur in intrinsically disordered regions, determine the identity of the calcineurin signaling network and drive its evolution. Her research uncovered the mechanism by which immunosuppressant drugs, FK506 and cyclosporin A, inhibit calcineurin, and continues to elucidate conserved aspects of substrate recognition and dephosphorylation by calcineurin. After studying calcineurin signaling in yeast for many, in 2016 Dr. Cyert redirected her efforts towards systematically identifying human calcineurin signaling pathways using experimental and computational methods (See Wigington et al. Molecular Cell, 2020, Ulengin-Talkish, 2021, Tsekitsidou et al, 2023).

Dr. Cyert is a prominent member of the phosphatase and calcium-signaling research communities; served as organizer for the 2016 and 2018 FASEB Protein Phosphatase conferences, and is on the organizing committee for the International Symposia on Calcium Binding Proteins. Dr. Cyert is a longstanding member of the ASBMB where she is a current member of the Advisory Council, co-organized the 2022 annual conference, and formerly served on the Meetings Committee (2022-2024) and Public Affairs Advisory Committee (2015-2021). In 2024, she was named as an ASBMB fellow.

Professor Cyert is also an award-winning teacher and mentor. She developed and has published papers about an innovative inquiry-based laboratory course for Stanford undergraduates, which utilizes *S. cerevisiae* to analyze mutations in the human p53 tumor suppressor. She was the Senior Associate Vice Provost for Undergraduate Education from 2010-13, served on the Education committee of the American Society for Cell Biology, and taught in ASCB-sponsored Cell Biology workshops in Africa from 2010-2016. Dr. Cyert directed a large NIH funded graduate program in Cell and Molecular Biology at Stanford (2009-2019) and served on the NIH TWD-A study section that reviews training grants. She was honored with the Stanford Biosciences Excellence in Mentoring and Service Award in 2016. Professor Cyert has received fellowships from the American Cancer Society, the Life Sciences Research Foundation and the Lucille P. Markey Charitable Trust and was named by Stanford University as a Gabilan Fellow, a Terman Fellow and as the Thomas W. and Susan B. Ford University Fellow in Undergraduate Education. In 2022, she received the Outstanding Leader Award from the Stanford Faculty Women's Forum.

Education

1988:	Ph. D. in Genetics Department of Biochemistry and Biophysics University of California, San Francisco, CA
1980:	A. B. in Biochemical Sciences Department of Biochemistry and Molecular Biology Harvard University, Cambridge, MA

Positions:

2020-present	Chair, Department of Biology Stanford University, Stanford, CA
2014-2020	Associate Chair, Department of Biology Stanford University, Stanford, CA
2010-2013	Senior Associate Vice Provost for Undergraduate Education Stanford University, Stanford, CA
2006-present	Professor, Department of Biology Stanford University, Stanford, CA
1999-2006:	Associate Professor, Department of Biology, Stanford University, Stanford, CA
1992- 1999:	Assistant Professor, Department of Biology, Stanford University, Stanford, CA
1988-1992:	Postdoctoral Fellow, Department of Molecular and Cell Biology, Division of Biochemistry and Molecular Biology, University of California, Berkeley, CA advisor: Dr. Jeremy Thorner
1981-1988:	Graduate Student, Department of Biochemistry and Biophysics, University of California, San Francisco, CA advisor: Dr. Marc Kirschner

Honors and Awards:

2024	Fellow of the American Society for Biochemistry and Molecular Biology
2022	Outstanding Leader Award from Stanford Faculty Women's Forum
2018	Dr. Nancy Chang endowed professorship
2015-2016	Stanford Biosciences Excellence in Mentoring and Service Award
2014-present	Gabilan Fellow, Stanford University
2011-present	Thomas W. & Susan B. Ford University Fellow in Undergraduate Education
2005	Dean's Award for Distinguished Teaching
1997-2000	Terman Fellow, Stanford University
1994-1998	Procter and Gamble Young Investigator
1993-1998:	Young Investigator Award, National Sciences Foundation
1991-1997:	Scholar, Lucille P. Markey Charitable Trust
1989-1991:	Sterling Research Group Fellow of the Life Sciences Research Foundation
1988-1989:	American Cancer Society Postdoctoral Fellowship

1983-1984: University of California, San Francisco, Chancellor's Fellowship
1981-1983: University of California Regents' Fellowship
1980: A. B., *summa cum laude*, Harvard University

Professional Service:

2026: Organized mini-symposium at ASBMB Meeting
2025 External review committee, Tetrad graduate program, UCSF
2024-present Member, Stanford Task Force on Synthetic Biology
2024 – 2027 Member, ASBMB Council
2024-present PP3CA Hope Foundation; Advisory board member
2024 ZRG1 MBBC-F Study Section, adhoc reviewer
2024 External review committee, Dept. Cell Systems Biology, University Toronto
2021- present Member Stanford SciQube steering committee
2021 – 2024 FASEB Science Research Conferences Advisory Committee
2020 - 2022 Co-Organizer, 2022 ASBMB annual meeting
2022 – 2024 Member, meetings committee ASBMB
2017 – present Editorial Board, Open Biology, Royal Society open access journal
2017 - 2018 Organizer, FASEB Protein Phosphatase Conference
2016 - 2019 Chair, Provost's Advisory Committee on Postdoctoral Affairs
2016 - 2018 Advisory Board, Stanford University
2015 – 2021 Member, ASBMB Public Affairs Advisory Committee
2015 - 2020 Biosciences Diversity Advisory Council
2015 - 2016 Co-Organizer, FASEB Protein Phosphatase Conference
2011 – 2016 NIH TWD-A Study Section, permanent member
2010 - present Graduate Diversity Steering Committee, office of Vice Provost for Grad Education
2010 – 2016 Instructor, ASCB African Workshops on Cell Biology of Parasites at University of Ghana
2009 - present Editorial Board, Molecular & Cellular Biology
2002 - present Organizing committee, International Symposium on Calcium-Binding Proteins
2002 – 2005 NIH Study Sections MBC1, CDF3, CSD, permanent member

Research Publications:

1. Bradburn DA, Reis JC, Arthanari H and **Cyert MS** (2025) A composite motif in calcimembrin/C16orf74 dictates multimeric dephosphosphorylation by calcineurin. Nat Commun. **16**, 9941.
2. Tsekitsidou E, Wang JT, Wong, CJ, Ulengin-Talkish I, Stearns T, Gingras A-C and **Cyert MS** (2023) Calcineurin associates with centrosomes and regulates cilia length maintenance. J. Cell Sci**. 136,** 260353.
   Named best research article of 2023.
3. Ulengin-Talkish U, Parson MAH, Jenkins ML, Roy J, Shih AZL, St-Denis N, Gulyas G, Balla T, Gingras AC, Várnai P, Conibear E, Burke JE, and **Cyert MS** (2021) Palmitoylation

targets the Calcineurin phosphatase to the Phosphatidylinositol 4-kinase complex at the plasma membrane. Nat. Comm. 12, 6064.
Highlighted in Bassot et al, Cell Calcium 2022.

4. Hein JB, **Cyert MS** and Fordyce PM. (2021) MRBLE-pep measurements reveal accurate binding affinities for B56, a PP2A regulatory subunit. ACS Measurement Science AU. 1, 56-64.
5. Hein JB, Nguyen HQ, **Cyert MS** and Fordyce PM. (2020) Protocol for Peptide Synthesis on Spectrally Encoded Beads for MRBLE-pep Assays. Bio Protoc. 10, eE669.
6. Wigington CP, Roy J, Damle NP, Yadav VK, Blikstad C, Resch E, Wong CJ, Mackay DR, Wang JT, Krystkowiak I, Bradburn D, Tsekitsidou E, Hong SH, Kaderali MA, Xu SL, Stearns T, Gingras A-C, Ullman KS, Ivarsson Y, Davey NE, **Cyert MS**. (2020) **Systematic** discovery of Short Linear Motifs decodes calcineurin phosphatase signaling. *Mol. Cell* 79, 342-358.
Highlighted in Li and Hogan, Cell Calcium, 2021.
7. Nguyen N.U.N., Canseco D.C., Xiao F., Nakada Y., Li S., Lam N.T., Muralidhar S.A., Savla J.J., Hill J.A., Le V., Zidan K.A., El-Feky, H.W., Roy J., **Cyert M.S**., Rothermel, B.A., Sadek, H.A. (2020) A calcineurin-Hoxb13 axis regulates growth mode of mammalian cardiomyocytes. *Nature*, 582: 271-276.
8. Nguyen, H.Q., Roy, J., Harink, B., Damle, N.P., Baxter, B.C., Brower, K. Kortemme, T., Thorn, K.S., **Cyert, M.S**., Fordyce P.M. (2019) Quantitative mapping of protein-peptide affinity landscapes using spectrally encoded beads. Elife. 8:e40499. Doi: 10.7554/eLife.40499.
9. Bond R, Ly N, **Cyert MS**. (2017) The unique C-terminus of calcineurin isoform CNAβ1 confers non-canonical regulation of enzyme activity by Ca2+ and calmodulin. J Biol Chem. 292: 16709-21.
10. Ly, N. and **Cyert, M.S**. (2017) Calcineurin, the Ca^{2+}-dependent phosphatase regulates Rga2, a Cdc42GTPase activating protein, to modulate pheromone signaling. *Mol. Biol. Cell*, 28: 576-86.
11. Hekmat-Scafe, D.S., Brownell, S.E., Seawell, P.C., Malladi, D., Conklin Imam, J.F,. Singla, V., Bradon, N**., Cyert, M.S**. and Stearns, T. (2016) Biochem. Mol. Biol. Educ. 45:161-178.
12. Arsenault, H.E., Roy, J., Mapa, C.E., **Cyert, M.S.,** Benanti, J.A. (2015) Hcm1 integrates signals from Cdk1 and calcineurin to control proliferation. *Mol. Biol. Cell*, 26: 3570-7.
13. Brownell, S.E., Hekmat-Scafe, D.S., Singla, V., Chandler Seawell, P., Conklin Imam, J.F., Eddy, S.L., Stearns, T. , **Cyert, M.S**. (2015) A high-enrollment course-based undergraduate research experience improves student conceptions of scientific thinking and ability to interpret data. *CBE Life Sci Educ*. 14: 1-14.
14. Guiney, E.L., Elias, J. **Cyert M.S**. (2015) Calcineurin regulates the yeast synaptojanin Inp53/Sjl3 during membrane stress. *Mol. Biol. Cell*, 26: 769-85.
15. Goldman, A., Roy, J., Bodenmiller, B., Wanka, S., Landry, C., Aebersold, R., **Cyert, M.S.** (2014) The Calcineurin Signaling Network Evolves via Conserved Kinase-Phosphatase modules that transcend substrate identity. *Mol. Cell,* **55**, 1-14.
16. Alvaro, C.G., O'Donnell, A.F. Prosser, D.C. Augustine, A.A., Brodsky, J.L. **Cyert, M.S**., Wendland, B., Thorner, J. (2014) Specific alpha-arrestins negatively regulate *Saccharomyces cerevisiae* pheromone response by down-modulating the G-protein coupled receptor Ste2. *Mol. Cell. Biol*. **34**, 2660-81.

17. Holmes, K.J. Klass, D. M. Guiney, E.L., **Cyert M.S**. (2013) Whi3, an *S. cerevisiae* RNA-binding protein, is a component of stress granules that regulates levels of its target mRNAs. *PLoS One* **8,** e84060.
18. O'Donnell, A., Huang, L. Thorner, J. and **Cyert, M. S.** (2013) A calcineurin-dependent switch controls the trafficking function of α-arrestin Aly1/Art6. *J.Biol.Chem*., **288**, 24063-80.
19. Grigoriu, S., Bond, R., Cossio, P., Chen, J.A., Ly, N., Hummer, G., Page, R. **Cyert, M.S**., Peti, W. (2013) The molecular mechanism of substrate engagement and immunosuppressant inhibition of calcineurin. *PlosBiology,* **11**, e1001492.
20. Minear, S., O'Donnell, A.F., Ballew, A., Giaever, G., Nislow, C., Stearns, T. and **Cyert, M.S.** (2011) Curcumin inhibits growth of Saccharomyces cerevisiae through iron chelation. *Eukaryotic Cell*, **10**,1574-81.
21. Piña, F.J., O'Donnell, A.F., Pagant, S., Piao, H.L., Miller, J.P., Fields, S., Miller, E.A., **Cyert, M.S.** (2011) Hph1 and Hph2 are novel components of the Sec63/62 posttranslational translocation complex that aid in vacuolar proton ATPase biogenesis, *Eukaryot. Cell*, **10**, 63-71.
22. O'Donnell, A.F., Apffel, A., Gardner, R.G., **Cyert, M.S.** (2010) α-Arrestins, Aly1 and Aly2 regulate intracellular trafficking in response to nutrient signaling, *Mol. Biol. Cell.* **21**, 3552-66.
23. Rodríguez, A., Roy, J., Martínez-Martínez, S., Niño-Moreno, P., López-Maderuelo, M. D., Ortí, L., Pantoja-Uceda, D., Pineda-Lucena, A., **Cyert, M.S.,** Redondo, J.M. (2009) A conserved docking surface on calcineurin mediates interaction with substrates and immunosuppressants, *Mol. Cell*. **33**, 316-326.
24. Roy, J., Li, H., Hogan, P. and **Cyert, M.S.** (2007) A conserved docking site modulates substrate affinity for calcineurin, signaling output, and in vivo function, *Mol. Cell 25, 889-901.*
25. Sopko, R., Huang, D., Preston, N. , Chua, G., Papp, B, Kafadar, K., Snyder, M., Oliver, S., **Cyert, M.,** Hughes, T., Boone, C., and Andrews, B. (2006) Mapping pathways and phenotypes by systematic gene overexpression. *Mol. Cell* **21**, 319-330.
26. Bultynck, G., Heath, V.L., Majeed, A.P. Galan, J.M., Haguenauer-Tsapis, R. and **Cyert, M.S**. (2006) Slm1p and Slm2p are novel substrates of the calcineurin phosphatase required for heat stress-induced endocytosis of the yeast uracil permease. *Mol. Cell. Biol.* **26**, 4729-4745.
27. Karlin, S., Brocchieri, L., Campbell, A., **Cyert, M**., Mrazek J. (2005) Genomic and proteomic comparisons between bacterial and archaeal genomes and related comparisons with the yeast and fly genomes. Proc Natl Acad Sci U S A. **102**, 7309-14.
28. Denis, V. and **Cyert, M.S.** (2005) Molecular analysis reveals localization of *Saccharomyces cerevisiae* protein kinase C to sites of polarized growth and Pkc1p targeting to the nucleus and mitotic spindle. *Euk Cell* 4, 36-45.
29. Kafadar, K, and **Cyert M.S**. (2004) Integration of stress responses: Modulation of calcineurin signaling in yeast by protein kinase A. *Euk. Cell* 3, 1147-1153
30. Heath, V.L., Shaw, S. L., Roy, S. and **Cyert, M.S.** (2004) Hph1p and Hph2p: Novel components of calcineurin-mediated stress responses in *S. cerevisiae*. *Euk. Cell* **3**, 695-704.

31. Kafadar, K., Zhu H., Snyder, M. and **Cyert, M.S.** (2003) Negative regulation of calcineurin signaling by Hrr25p, a yeast homolog of casein kinase I. *Genes & Dev.* **17**, 2698-2708.
32. Yoshimoto, H., Saltsman, K., Gasch, A.P., Li, H.X., Ogawa, N., Botstein, D., Brown, P.O. and **Cyert, M.S.** (2002) Genome-wide analysis of gene expression regulated by the calcineurin/Crz1p signaling pathway in *S. cerevisiae*. *J. Biol. Chem.* **277**, 31079-31088.
33. Boustany, L.M. and **Cyert, M.S.** (2002) Calcineurin-dependent regulation of Crz1p nuclear export requires Msn5p and a conserved calcineurin docking site. *Genes&Dev.* **16**, 608-619.
34. Denis, V and **Cyert, M.S.** (2002) Internal Ca^{2+} release in yeast is triggered by hypertonic shock and mediated by a TRP channel homologue. *J. Cell Biol*. **156**, 29-34.
35. Polizotto, R. S. and **Cyert, M. S.** (2001) Calcineurin-dependent nuclear import of the transcription factor Crz1p requires Nmd5p. *J. Cell Biol*, **154**, 951-960.
36. Williams, K. E. and **Cyert, M. S.** (2001) The eukaryotic response regulator Skn7p regulates calcineurin signaling through stabilization of Crz1p. *Embo J.*, **20**, 3473-3483.
37. Conboy, M. J. and **Cyert, M. S.** (2000) Vacuole biogenesis required Luv1p, a novel yeast prevacuolar/endosomal protein. *Mol. Biol. Cell*, **11**, 2429-43.
38. Jiang, B. and **Cyert, M. S.** (1999) Identification of a novel region critical for calcineurin function *in vivo* and *in vitro*. *J. Biol. Chem.*, **274**, 18543-18551.
39. Gerontides, A. S., Guo, J., and **Cyert M. S.** (1999) Yeast calcineurin regulates nuclear localization of the Crz1p transcription factor through dephosphorylation. *Genes &Dev..*, **13**, 798-803.
40. Okano, H., **Cyert, M. S.**, and Ohya, Y. (1998) Importance of phenylalanine residues of yeast calmodulin for target binding and activation. *J. Biol. Chem.*, **273**, 26375-26382.
41. Withee, J., Sen, R. and **Cyert, M. S.** (1998) Ion tolerance of Saccharomyces cerevisiae lacking the Ca^{2+}/CaM-dependent phosphatase (Calcineurin) is improved by mutations in *URE2* or *PMA1*. *Genetics*, **149**, 865-878.
42. Zhao, C., Jung, U.S., Garrett-Engele, P., Roe, T., **Cyert, M. S.** , and Levin, D. (1998) Temperature-induced expression of yeast *FKS2* is under the dual control of protein kinase C and calcineurin. *Mol. Cell. Biol.*, **18**, 1013-1022.
43. Stathopoulos, A. and **Cyert, M. S.** (1997) Calcineurin acts through the CRZ1/TCN1-encoded transcription factor to regulate gene expression in yeast. *Genes and Devel.*, **11**, 3432-3444.
44. Withee, J., Mulholland, J., Jeng, R. and **Cyert, M. S.** (1997) An essential role of the yeast pheromone-induced Ca^{2+} signal is to activate calcineurin. *Mol. Biol. Cell*, **8**, 263-277.
45. Pozos,T., Sekler, I. and **Cyert, M. S.** (1996) The product of *Hum1*, a novel yeast gene, is required for vacuolar Ca^{2+}/H^{+} exchange and is related to mammalian Na^{+}/Ca^{2+} exchangers. *Mol. Cell. Biol.*, **16**, 3730-3741.
46. Lippuner, V., **Cyert, M.S.**, and Gasser, C. S. (1996) Two classes of plant cDNAs complement yeast calcineurin mutants. *J. Biol. Chem.*, **271**, 12859-12866.
47. Garrett-Engele, P., Moilanen, B., and **Cyert, M. S.** (1995) Calcineurin, the Ca^{2+}/calmodulin-dependent protein phosphatase, is essential in yeast mutants with cell integrity defects and in mutants that lack a functional vacuolar H^{+}-ATPase. *Mol. and Cell. Biol.*, **15**, 4103-4114.

48. **Cyert, M. S.** and Thorner, J. (1992) Regulatory subunit (CNB1 gene product) of yeast Ca^{2+}/calmodulin-dependent phosphoprotein phosphatases is required for adaptation to pheromone. *Mol.Cell. Biol.*, **12**, 3460-3469.
49. **Cyert, M. S.**, Kunisawa, R., Kaim, D. and Thorner, J. (1991) Yeast has homologs (*CNA1* and *CNA2* gene products) of mammalian calcineurin, a calmodulin-regulated phosphoprotein phosphatase. *Proc. Natl. Acad. Sci. U. S. A.*, **88**, 7376-7380.
50. **Cyert, M. S.**, Scherson, T., and Kirschner, M. W. (1988) Monoclonal antibodies specific for thiophosphorylated proteins recognize *Xenopus* MPF. *Dev. Biol.* **129**, 209-216.
51. **Cyert, M. S.**, and Kirschner, M. W. (1988) Regulation of MPF activity in vitro. *Cell* **53**, 185-195.
52. **Cyert, M.** and Kirschner, M. (1988) Studies on Maturation Promotion Factor in Yeast. *Cell Regulation* Spring, 19-21.
53. Sorensen R., **Cyert, M.**, and Pedersen, R. (1985) Active maturation-promoting factor is present in mouse eggs. *J. Cell Biol.* **100,** 1637-1640.

Reviews:

1. Ulengin-Talkish, I. and Cyert, M.S. (2023) A cellular atlas of calcineurin signaling. *Biochim Biophys Acta Mol Cell Res*. **1870**: 119366-119378.
2. Roy J. Cyert M.S. (2020) Deciphering the ABCs of SLiMs in G1-CDK Signaling. Curr. Biol. 30, R1382-R1385.
3. Roy J. Cyert M.S. (2019) Identifying New Substrates and Functions for an Old Enzyme: Calcineurin. Cold Spring Harbor Perspectives Biology 12, a035436. doi: 10.1101/cshperspect.a035436.
4. Davey, N.E., **Cyert, M.S.,** Moses, A.M. (2015) Short linear motifs- ex nihilo evolution of protein regulation. Cell Commun Signal., **13,** 43-57.
5. **Cyert, M. S**. and Philpott, C. (2013) Regulation of Cation Balance in *Saccharomyces cerevisiae. Genetics* **193**,677-713.
6. Roy, J and **Cyert, M. S.** (2013) Calcineurin. In: Encyclopedia of Metalloproteins. Kretsinger, R.H., Uversky, V.N., Permyakov, E.A. (ed.s) Springer, New York.
4. Roy, J. and **Cyert, M. S.** (2009) Cracking the phosphatase code: docking interactions determine substrate specificity. *Science Signaling*, **2**, re9.
5. **Cyert, M. S.** (2003) Calcineurin signaling in Saccharomyces cerevisiae: how yeast go crazy in response to stress. *Biochem Biophys Res Commun*. **311**, 1143-50.
6. **Cyert, M. S.** (2001) Genetic analysis of calmodulin and its targets in *Saccharomyces cerevisiae*. *Annu. Rev. Genet*. **35**, 647-72.
7. **Cyert, M. S.** (2001) Regulation of nuclear localization during signaling. *J. Biol. Chem*. **276**, 20805-20808.
8. **Cyert, M. S.** (1993) The function of Ca^{2+}/calmodulin-regulated phosphatases in yeast. *Adv. Prot. Phosph.*, **7**, 429-443.
9. **Cyert, M. S.** (1992) Immunosuppressants hit the target. *Current Biology*, **2**, 18-20.
10. **Cyert, M. S.** and Thorner, J. (1989) Putting it on and taking it off: phosphoprotein phosphatase involvement in cell cycle regulation. *Cell* **57**, 891-893.
11. Gerhart, J., Wu, M., **Cyert, M.**, and Kirschner, M. (1985) M-phase promoting factors from the eggs of *Xenopus laevis*. *Cytobios* **43**, 335-347.

Community Service:

Jan 2016:	instructor for ASCB International Workshop, Legon, Ghana
July 2013:	instructor for ASCB International Workshop, Legon, Ghana
July 2012:	instructor for ASCB International Workshop, Legon, Ghana
July 2011:	instructor for ASCB International Workshop, Kumasi, Ghana
July 2010:	instructor for ASCB International Workshop, Korle-bu, Ghana
Jan 2010:	instructor for ASCB International Workshop, Dar-es-Salaam, Tanzania

Invited Presentations: (from 2015)

December 2026	FASEB-JAPPR conference on Protein Phosphatases
February 2026	European Calcium Society Meeting, Doha Qatar
February 2026	Protein Modules Community seminar (online)
July 2025	Keynote lecture, EMBO conference Protein Phosphatases, Wurzburg, DE
June 2025	2025 Ion channel Signaling in Health and Disease
January 2025	SciQUBE symposium, Stanford
December 2024	FASEB-JAPPR conference on Protein Phosphatases
August 2024	European Bioinformatics Institute
August 2024	Keynote lecture, European Calcium Society Meeting, Cambridge, UK
July 2024	Keynote lecture, Gordon Research Seminar on Calcium Signaling
July 2024	Gordon Research Conference on Calcium Signaling
June 2024	UCLA-Cedars Sinai Pancreas Summit Seminar
November 2023	European Calcium Society Symposium, Leuven, Belgium
June 2023	FASEB conference on Calcium Signaling, Dublin Ireland
June 2023	EMBL Motif Meeting, Heidelberg Germany
December, 2022	FASEB-JAPPR Conference on Protein Phosphatases, Palm Springs
November, 2022	Department Pharmacology, University of Pittsburgh Medical School
July, 2022	FASEB conference on Protein Lipidation
June, 2022	FASEB conference on Protein Kinases, Canada
May, 2022	Keynote lecture, Gordon Research Conference on Intrinsically Disordered Proteins
May, 2022	EMBO workshop Reversible Phosphorylation, Signal integration and Drug discovery, Greece
May, 2022	Dept. Physiology, UTSW, Dallas TX
April, 2022	ASBMB conference, Philadelphia PA
February, 2022	Dept of Cancer & Cellular Biology, Temple University, Philadelphia PA
November, 2021	Dept of Biochemistry, University of Utah, Salt Lake City, UT
April, 2021	Student Symposium, International Max Planck Research School for Chemical and Molecular Biology Dortmund GE
March, 2021	Dept of Biochemistry, Dartmouth
March, 2021	Department of Biochemistry and Biophysics, Univ North Carolina
October, 2020	McCardle Laboratory for Cancer Research, University of Wisconsin
October, 2020	Department of Cellular Biology, University of Georgia
December, 2019	Keynote lecture, EMBO workshop on Intrinsic Disorder, Bangalore India
October, 2019	Calcium Signaling Conference, Fez Morocco
August 2019	Plenary speaker, International Yeast Conference, Sweden

July, 2019	Protein Kinases, FASEB conference, Palm Springs, CA
June, 2019	FEBS Workshop on Protein Phosphatases, Debrecen Hungary; IUBMB lecturer
May, 2019	Department of Pharmacology, Yale University, New Haven CT
April, 2019	Department of Pharmacology, University of California, San Diego, CA
Sept., 2018	Department of Genetics, Case Western Reserve U., Cleveland, OH
Sept., 2018	European Calcium Meeting, Late Breaking topics, Hamburg, Germany
August, 2018	Post-translational Regulation of Cell Signaling, Salk Institute, LaJolla CA
June, 2018	Calcium and Cell Function, FASEB conference, Lake Tahoe, CA
Oct, 2017	International Symposium on Calcium Binding Proteins, Osaka Japan
Aug, 2017	Grant Writing Academy Symposium, Stanford, CA
Aug, 2017	Stanford Bio-X symposium, Stanford CA
July, 2017	EMBO Conference on Protein Phosphatases, Paris, France
March, 2017	Dept. Biochemistry, University of Kentucky, Louisville, KY
Feb, 2017	Dept. Cell & Developmental Biology, Vanderbilt Med Ct, Nashville TN
Jan, 2017	Dept. of Biology, California Institute of Technology
Dec, 2016	Minisymposium presentation, ASCB meeting, San Francisco
Oct, 2016	12th Intl Conf on Protein Phosphatases, Osaka, Japan
Oct, 2016	Novonordisk Foundation Conference on Protein Signaling
July, 2016	Protein Phosphatases, FASEB conference, Steamboat Springs, CO
June, 2016	Gordon Research Conference: Disordered Proteins, Switzerland
March, 2016	Langston University, Langston Oklahoma
Feb, 2016	Dept. Mol. Cell. Pharmacology, University of Miami
Dec, 2015	Minisymposium presentation, ASCB meeting, San Diego
July, 2015	Europhosphatase conference, Turku, Finland
July, 2015	EMBL, Heidelberg, Germany
June, 2015	Department of Biochemistry, Uppsala University

Grants (from 2016):

Active

R35GM136243 Cyert (PI) 08/01/2025-07/31/2030
NIH/NIGMS

Elucidating calcineurin signaling mechanisms at membranes

Major goals of this research is to examine signaling by the conserved calcineurin protein phosphatase. These studies focus on mechanisms, including reversible protein lipidation (S-Acylation) that direct calcineurin to membranes, i.e. where Ca2+ signals localize. These analyses will provide new insights into calcineurin functions in healthy and diseased cells
*Grant was submitted May 2024, favorably reviewed October 2024, now waiting for notice of award.

R01DK140433 Husain (PI) Cyert (MPI) 08/2024 – 05/2028
NIH/NIDDK

Elucidating novel mechanisms for pancreatitis through calcineurin signaling

The major goals of this research are to define the phosphosignaling networks in acute pancreatitis, to characterize the role of calcineurin in these signaling networks and to evaluate novel calcineurin substrates related to these pathways.

Completed:

R35GM136243-S1 Cyert (PI) 07/01/2023 – 03/31/2025
NIH/NIGMS
Supplement to*: Systematic elucidation of calcineurin phosphatases signaling in humans*
This award provides support under the Research Supplements to Promote Diversity in Health-Related Research Program for William King beginning 7/01/23.

Stanford Diabetes Research Center, Pilot and Feasibility award 01/01/2023 – 12/31/2024
Mapping calcineurin signaling pathways that cause pancreatitis

R35GM136243 Cyert (PI) 04/01/2020 – 03/31/2025
NIH/NIGMS
Systematic elucidation of calcineurin phosphatases signaling in humans
The goals of this research are to elucidate, systematically, the functions, substrates and regulatory mechanisms for the human calcineurin phosphatase.

Stanford Bio-X Interdisciplinary Initiatives Seed Grant:
Cyert (co-PI) and Sohail Husain (Gastroenterology) 02/01/2021- 01/31/2023
Mapping calcineurin signaling pathways that cause pancreatitis

R01GM129236 Cyert (PI) 04/01/2019 – 03/31/2021
NIH/NIGMS
Discovering the mechanisms and function of signaling by the calcineurin beta1 isoform.
The goals of this research are to elucidate functions, substrates and regulatory mechanisms unique to the beta1 splice isoform of human calcineurin.

5T32 GM007276-44 Cyert (PI)/Morrison (PI) as of 2019 07/01/75 – 06/30/2024
NIH/NIGMS (Training Grant)
Cellular and Molecular Biology Training Program
Supports Stanford Biosciences Graduate Students in 5 programs (Biology, Biochemistry, Molecular Cellular Physiology, Microbiology and Immunology, Structural Biology), Stanford University and 5% salary support for Dr. Cyert

R13CA228489 Cyert (PI) 07/15/2018 – 7/20/2018
NIH/NCI
FASEB Summer Research Conference on Protein Phosphatases

R01GM119336 Cyert (PI) 04/01/2016 – 03/31/2020
NIH/NIGMS
Identifying the Human Calcineurin Signaling Network
The goals of this research are to use experimental and computational methods to identify calcineurin substrates and characterize their functional regulation by calcineurin.

Supplement to 1R01GM119336 Cyert (PI) 9/01/18
This competitive supplement grant was awarded for purchase of a benchtop microscope

Stanford Bio-X Interdisciplinary Initiatives Seed Grant:

Deciphering the language of cellular protein interaction networks using spectrally encoded peptide-bead libraries Cyert (co-PI) with P. Fordyce (Bioengineering) 2016-2018

Supplement to 5T32 GM007276-35 Cyert (PI) 07/01/2016 – 06/30/17
NIH/NIGMS (Training Grant)
This competitive supplement grant was awarded for development of new graduate curriculum to enhance data rigor and reproducibility. See:
https://www.nigms.nih.gov/training/instpredoc/Pages/admin-supplements.aspx.