

CURRICULUM VITAE

CRAIG MONTELL

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Patricia and Robert Duggan Professor of Neuroscience and MCDB
(CV created Feb. 28, 2016)

Birth October 4, 1955, New York, New York

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Education

B.A. March 1978 Department of Bacteriology, University of California, Berkeley
Ph.D. Dec. 1983 Department of Microbiology, University of California, Los Angeles

Honorary Degrees

Dr. h.c. (honora causa) 2010 KU (Katholieke Universiteit) Leuven, Belgium
Dr. h.m. (Humanities in Medicine) 2011 Baylor College of Medicine, Houston, TX

Honors and special lectures

1982 Rittenberg Award, Outstanding Graduate Student in Microbiology, UCLA
1984 Damon Runyon-Walter Winchell Postdoctoral Fellowship
1989 National Science Foundation Presidential Young Investigator Award
1989 Bergmann Memorial Research Award
1990 American Cancer Society, Junior Faculty Award
1998 Jorge Chevesich Memorial Lecture, Albert Einstein College of Medicine
2005 The Pflügers Archive Lecture, Leuven, Belgium
2007 The Grass Traveling Scientist Distinguished Lecture, UCLA
2007 Keynote address, Gordon Research Conference on Ca²⁺ signaling
2007 Keynote address, Keystone Symposium on TRP channels
2008 Plenary lecture, 48th American Society for Cell Biology Meeting, San Francisco
2010 Doctor Honoris Causa for Fundamental Biomedical Research, KU (Katholieke Universiteit), Leuven, Belgium
2010 Plenary address: 51st Annual Drosophila Research Conference, Washington, DC
2011 Honorary Doctor of Humanities in Medicine, Baylor College of Medicine
2011 Keynote lecture, NIDA Symposium on Lipid Ligands, Receptors and TRPs, Durham, NC
2012 Keynote lecture, International Workshop on TRP Channels, Valencia, Spain
2013-present Patricia and Robert Duggan Professor of Neuroscience, MCDB Dept., UCSB

2013	Ebashi keynote lecture: 18 th International Symposium on Calcium Binding Proteins and Calcium Function in Health and Disease, Kiruna, Sweden
2013	Rockefeller University “Friday Lecture Series” (University wide lecture)
2013	<i>Neuron</i> (Cell Press) selected the report on TRP channels as the most influential neuroscience paper of 1989
2014	Elected Fellow of the American Association for the Advancement of Science (AAAS): Neuroscience Section
2014	The Thomas Vary Distinguished Lecture, The Pennsylvania State University College of Medicine
2015-2020	NIH Director’s Pioneer Award
2016	Keynote lecture, Cutting Edge Concepts in Molecular Pharmacology: GPCRs – G-proteins – TRP channels, Berlin-Dahlem, Germany

Appointments

1983-1988	Postdoctoral Fellow, Department of Biochemistry, University of California, Berkeley, CA.
1988-1994	Assistant Professor, Departments of Biological Chemistry and Neuroscience, The Johns Hopkins University, School of Medicine, Baltimore, MD.
1994-1998	Associate Professor, Departments of Biological Chemistry and Neuroscience, The Johns Hopkins University, School of Medicine, Baltimore, MD.
1994-2000	Founding Director, Graduate Program in Biological Chemistry
2000-2006	Director, BCMB Graduate Program
1998-2013	Professor, Departments of Biological Chemistry and Neuroscience, The Johns Hopkins University, School of Medicine, Baltimore, MD.
2013-present	Adjunct Professor, Department of Biological Chemistry, The Johns Hopkins University, School of Medicine, Baltimore, MD.
2013-present	Patricia and Robert Duggan Professor, Department of Molecular, Cellular and Developmental Biology (MCDB), University of California, Santa Barbara

Publications

1. Montell, C., Fisher, E.F., Caruthers, M.H. and Berk, A.J. 1982. Resolving the functions of overlapping viral genes by site-specific mutagenesis at a mRNA splice site. *Nature* 295, 380-384.
2. Montell, C., Fisher, E.F., Caruthers, M.H. and Berk, A.J. 1983. Inhibition of RNA cleavage but not polyadenylation by a point mutation in mRNA 3' consensus sequence AAUAAA. *Nature* 305, 600-605.
3. Montell, C., Courtois, G., Eng, C., and Berk, A.J. 1984. Complete transformation by adenovirus 2 requires both E1A proteins. *Cell* 36, 951-961.
4. Montell, C., Fisher, E.F., Caruthers, M.H. and Berk, A.J. 1984. Control of adenovirus E1B mRNA synthesis by a shift in the activities of RNA splice sites. *Mol. Cell. Biol.* 4, 966-972.
5. Montell, C. and Berk, A.J. 1984. Elimination of mRNA splicing by a point mutation outside the conserved GU at 5' splice sites. *Nucl. Acids Res.* 12, 3821-3827.

6. Montell, C., Jones, K., Hafen, E., and Rubin, G. 1985. Rescue of the *Drosophila* phototransduction mutation *trp* by germline transformation. *Science* 230, 1040-1043.
7. Zuker, C.S., Montell, C., Jones, K.R., Laverty, T. and Rubin, G.M. 1987. A rhodopsin gene expressed in photoreceptor cell R7 of the *Drosophila* eye: homologies with other signal transducing molecules. *J. Neurosci.* 7, 1550-1557.
8. Montell, C., Jones, K., Zuker, C. and Rubin, G. 1987. A second opsin gene expressed in the ultraviolet sensitive R7 photoreceptor cells of *Drosophila melanogaster*. *J. Neurosci.* 7, 1558-1566.
9. Montell, C. and Rubin, G. 1988. The *Drosophila ninaC* locus encodes two photoreceptor cell specific proteins with domains homologous to protein kinases and the myosin heavy chain head. *Cell* 52, 757-782.
10. Bloomquist, B. T., Shortridge, R. D., Schneuwly, S., Perdew, M., Montell, C., Steller, H., Rubin, G. and Pak, W. L. 1988. Isolation of a putative phospholipase C gene of *Drosophila*, *norpA*, and its role in phototransduction. *Cell* 54, 723-733.
11. Montell, C. and Rubin, G. M. 1989. Molecular characterization of the *Drosophila trp* locus: a putative integral membrane protein required for phototransduction. *Neuron* 2, 1313-1323.
12. Montell, C. 1989. Molecular genetics of *Drosophila* vision. *Bioessays* 11, 43-48.
13. Porter, J.A., Hicks, J., Williams, D. and Montell, C. 1992. Differential localizations of and requirements for the two *Drosophila ninaC* kinase/myosins in photoreceptor cells. *J. Cell Biol.* 116, 683-693.
14. Guerini, D, Montell, C. and Klee, C. B. 1992. Molecular cloning and characterization of the genes encoding the two subunits of *Drosophila melanogaster* calcineurin. *J. Biol. Chem.* 267, 22542-22549.
15. Okano, H., Hayashi, S., Tanimura, T., Sawamoto, K., Yoshikawa, S., Watanabe, J., Iwasaki, M., Hirose, S., Mikoshiba, K. and Montell, C. 1992. Regulation of *Drosophila* neural development by a putative secreted protein. *Differentiation* 52, 1-11.
16. Xiong, W.C. and Montell, C. 1993. *tramtrack* is a transcriptional repressor required for cell fate determination in the *Drosophila* eye. *Genes Dev.* 7, 1085-1096.
17. Porter, J.A. and Montell, C. 1993. Distinct roles of the *Drosophila ninaC* kinase and myosin domains revealed by systematic mutagenesis. *J. Cell Biol.* 122, 601-612.
18. Porter, J.A., Yu, M., Doberstein, S.K., Pollard, T.S. and Montell, C. 1993. Dependence of calmodulin localization in the retina on the NINAC unconventional myosin. *Science* 262, 1038-1042.
19. Xiong, W.C, Okano, H., Patel, N.H., Blendy, J.A. and Montell, C. 1994. *repo* encodes a glial-specific homeodomain protein required in the *Drosophila* nervous system. *Genes Dev.* 8, 981-994.
20. Nakamura, M., Okano, H., Blendy, J.A. and Montell, C. 1994. Musashi, a neural RNA binding protein required for *Drosophila* adult external sensory organ development. *Neuron* 13, 67-81.
21. Xiong, W.C. and Montell, C. 1995. Defective glia induce neuronal apoptosis in the *repo* visual system of *Drosophila*. *Neuron* 14, 581-590.

22. Porter, J.A., Minke, B. and Montell, C. 1995. Calmodulin binding to *Drosophila* NinaC required for termination of phototransduction. *EMBO J.* 14, 4450-4459.
23. Wes, P.D., Chevesich, J., Jeromin, A., Rosenberg, C., Stetten, G. and Montell, C. 1995. TRPC1, a human homolog of a *Drosophila* store-operated channel. *Proc. Natl. Acad. Sci. U.S.A.* 92, 9652-9656.
24. Wes, P.D., Yu, M. and Montell, C. 1996. RIC, a calmodulin-binding Ras-like GTPase. *EMBO J.* 15, 5839-5848.
25. Chevesich, J., Kreuz, A. and Montell, C. 1997. Requirement for the PDZ domain protein, INAD, for localization of the TRP store-operated channel to a signaling complex. *Neuron* 18, 95-105.
26. Arnon, A., Cook, B., Montell, C., Selinger, Z. and Minke, B. 1997. Calmodulin regulation of calcium stores in phototransduction of *Drosophila*. *Science* 275, 1119-1121.
27. Arnon, A., Cook, B., Gillo, B., Montell, C., Selinger, Z. and Minke, B. 1997. Calmodulin regulation of light adaptation and store-operated dark current in *Drosophila* photoreceptors. *Proc. Natl. Acad. Sci. U.S.A.* 94, 5894-5899.
28. Xu, X.Z., Li, H.S., Guggino, W.B. and Montell, C. 1997. Coassembly of TRP and TRPL produces a distinct store-operated conductance. *Cell* 89, 1155-1164.
29. Montell, C. 1997. New light on TRP and TRPL. *Mol. Pharmacol.* 52, 755-763.
30. Xu, X.Z., Choudhury, A., Li, X. and Montell, C. 1998. Coordination of an array of signaling proteins through homo- and heteromeric interactions between PDZ domains and target proteins. *J. Cell Biol.* 142, 545-555.
31. Montell, C. 1998. TRP trapped in fly signaling web. *Curr. Opin. Neurobiol.* 8, 389-397.
32. Xu, X.Z., Wes, P. D., Chen, H., Li, H.S., Yu, M., Morgan, S., Liu, Y. and Montell, C. 1998. Retinal targets for calmodulin include proteins implicated in synaptic transmission. *J. Biol. Chem.* 273, 31297-31307.
33. Li, H.S., Porter, J.A. and Montell, C. 1998. Requirement for the NINAC kinase/myosin for stable termination of the visual cascade. *J. Neurosci.* 18, 9601-9606.
34. Wes, P.D., Xu, X.Z., Li, H.S., Chien, F., Doberstein, S.D. and Montell, C. 1999. Termination of phototransduction requires binding of the NINAC myosin III and the PDZ protein INAD. *Nat. Neurosci.* 2, 447-453.
35. Montell, C. 1999. Visual transduction in *Drosophila*. *Ann. Rev. Cell Dev. Biol.* 15, 231-268.
36. Li, H.S., Xu, X.Z. and Montell, C. 1999. Activation of a TRPC3-dependent cation current through the neurotrophin BDNF. *Neuron* 24, 261-273.
37. Montell, C. 2000. Regulation of *Drosophila* visual transduction through a supramolecular signaling complex. In *Principles of Molecular Regulation*. P. M. Conn and A. R. Means, eds. (Humana Press Inc.).
38. Montell, C. 2000. PLC fills a GAP in G protein coupled signaling. *Nature Cell Biol.* 2, E82-83.

39. Xu, X.Z., Chien, F., Butler, A., Salkoff, L. and Montell, C. 2000. TRP γ , a *Drosophila* TRP-related subunit, forms a regulated cation channel with TRPL. *Neuron* 26, 647-657.
40. Montell, C. 2000. A PDZ protein Ushers in new links. 2000. *Nature Genet.* 26, 6-7.
41. Li, H.S. and Montell, C. 2000. TRP and INAD form the core complex required for retention of the signalplex in *Drosophila* photoreceptor cells. *J. Cell Biol.* 150, 1411-1421.
42. Montell, C. 2001. Physiology, phylogeny and functions of the TRP superfamily of cation channels. *Sci. STKE* 2001, re1.
43. Ma, H.T., Venkatachalam, K., Li, H.S., Montell, C., Kurosaki, T., Patterson, R.L. and Gill, D.L. (2001). Assessment of the role of the InsP₃ receptor in the activation of TRP channels and store-operated Ca²⁺ entry channels. *J. Biol. Chem.* 276, 18888-18896.
44. Montell, C. 2001. An end in sight to a long TRP. *Neuron* 30, 3-5.
45. Xu, X.Z., Moebius, F., Gill, D. L. and Montell, C. 2001. Regulation of Melastatin, a TRP-related protein, through interaction with a cytoplasmic isoform. *Proc. Natl. Acad. Sci. U.S.A.* 98, 10692-10697
46. Lee, S.J. and Montell, C. 2001. Regulation of the rhodopsin protein phosphatase, RDGC, through interaction with calmodulin. *Neuron* 32, 1097-1106.
47. Montell, C., Birnbaumer, L., Flockerzi, V., Bindels, R. J., Bruford, E. A., Caterina, M. J., Clapham, D. E., Harteneck, C., Heller, S., Julius, D., Kojima, I., Mori, Y., Penner, R., Prawitt, D., Scharenberg, A. M., Schultz, G., Shimizu, N. and Zhu, M. X. 2002. A unified nomenclature for the superfamily of TRP cation channels. *Mol. Cell* 9, 229-231.
48. Montell, C., Birnbaumer, L. and Flockerzi, V. 2002. The TRP channels, a remarkably functional family. *Cell* 108, 595-598.
49. Nakamura, M., Baldwin, D., Hannaford, S., Palka, J. and Montell, C. 2002. Defective Proboscis Extension Response (DPR), a member of the Ig superfamily required for the gustatory response to salt. *J. Neurosci.* 22, 3463-3472.
50. Montell, C. 2003. The venerable inveterate invertebrate TRP channels. *Cell Calcium* 33, 409-417.
51. Montell, C. 2003. Thermosensation: hot findings make TRPNs very cool. *Curr. Biol.* 13, R476-478.
52. Lee, S.J., Xu, H., Kang, L., Amzel, M. and Montell, C. 2003. Light adaptation through phosphoinositide-regulated translocation of *Drosophila* visual arrestin. *Neuron* 39, 121-132.
53. Hofmann, T., Chubanov, V., Gudermann, T. and Montell, C. 2003. TRPM5 is a voltage-modulated and Ca²⁺-activated monovalent selective cation channel. *Curr. Biol.* 13, 1153-1158.
54. Montell, C. 2003. Mg²⁺ homeostasis: the Mg²⁺-nificent TRPM channels. *Curr. Biol.* 13, R799-R801.
55. Clapham D.E., Montell C., Schultz G., and Julius, D. 2003. Compendium of voltage-gated ion channels: transient receptor potential channels. *Pharmacol Rev.* 55, 591-596.

56. Watnick, T.J., Jin, Y., Matunis, E., Kernan, M.J. and Montell, C. 2003. A flagellar polycystin-2 homolog required for male fertility in *Drosophila*. *Curr. Biol.* *13*, 2179-2184.
57. Montell, C. 2004. Molecular genetics of *Drosophila* TRP channels. *Novartis Found Symp.* *258*, 3-12; discussion 12-17.
58. Xu, H., Lee, S.J., Suzuki, E., Dugan, K.D., Stoddard, A., Li, H.S., Chodosh, L.A. and Montell, C. 2004. A lysosomal tetraspanin associated with retinal degeneration identified via a genome-wide screen. *EMBO J.* *23*, 811-822.
59. Montell C., Devreotes, P. 2004. From protein dynamics to animal behavior: new insights into complex cell regulatory mechanisms. *Curr Opin Cell Biol.* *16*, 115-118.
60. Lee, S.J. and Montell, C. 2004. Light-dependent translocation of visual arrestin regulated by the NINAC myosin III. *Neuron* *43*, 95-103.
61. Montell, C. 2004. Exciting trips for TRPs. *Nature Cell Biol.* *6*, 690-692.
62. Lee, S.J., Xu, H. and Montell, C. 2004. Rhodopsin kinase activity modulates the amplitude of the visual response in *Drosophila*. *Proc. Natl. Acad. Sci. U.S.A.* *101*, 11874-11879.
63. Lee, S.J. and Montell, C. 2004. Suppression of constant-light-induced blindness but not retinal degeneration by inhibition of the rhodopsin degradation pathway. *Curr. Biol.* *24*, 2076-2085.
64. Wang, T., Xu, H., Oberwinkler, J., Gu, Y., Hardie, R.C. and Montell, C. 2005. Light activation, adaptation, and cell survival functions of the Na⁺/Ca²⁺ exchanger, CalX. *Neuron* *45*, 367-378.
65. Harrison, S.M., Rudolph, J.L., Spencer, M.L., Wes, P.D., Montell, C., Andres, D.A. and Harrison, D.A. 2005. Activated RIC, a small GTPase, genetically interacts with the Ras pathway and calmodulin during *Drosophila* development. *Dev. Dyn.* *232*, 817-826.
66. Caterina, M.J. and Montell, C. 2005. Take a TRP to beat the heat. *Genes Dev.* *19*, 415-418.
67. Montell, C. 2005. The TRP superfamily of cation channels. *Sci. STKE* *2005* re3.
68. Wang, T. and Montell, C. 2005. Rhodopsin formation in *Drosophila* is dependent on the PINTA retinoid binding protein. *J. Neurosci.* *25*, 5187-5194.
69. Montell C. 2005. TRP channels in *Drosophila* photoreceptor cells. *J. Physiol.* *567*, 45-51.
70. Montell C. 2005. *Drosophila* TRP channels. *Pflügers Arch.* *451*, 19-28.
71. Bae, B.I., Xu, H., Igarashi, S., Fujimuro, M., Agrawal, N., Taya, Y., Hayward, S.D., Moran, T.H., Montell, C., Ross, C.A., Snyder, S.H. and Sawa, A. 2005. p53 mediates cellular dysfunction and behavioral abnormalities in Huntington's disease. *Neuron* *47*, 29-41.
72. Montell, C. 2005. The latest waves in calcium signaling. *Cell* *122*, 157-163.
73. Wang, T., Jiao, Y. and Montell, C. 2005. Dissecting independent channel and scaffolding roles of the *Drosophila* transient receptor potential channel. *J. Cell Biol.* *171*, 685-694.
74. Clapham, D.E., Julius, D., Montell, C., Schultz, G. 2005. International Union of Pharmacology. XLIX. Nomenclature and structure-function relationships of transient receptor potential channels. *Pharmacol Rev.* *57*, 427-450.

75. Montell, C. 2006. A mint of mutations in TRPM8 leads to cool results. *Nat Neurosci.* 9, 466-468.
76. Kwon, Y. and Montell, C. 2006. Dependence on the Lazaro phosphatidic acid phosphatase for the light maximum response. *Curr. Biol.* 16, 723-729.
77. Venkatachalam, K., Hofmann, T. and Montell, C. 2006. Lysosomal localization of TRPML3 depends on TRPML2 and the mucopolipidosis-associated protein TRPML1. *J. Biol. Chem.* 281, 17517-17527.
78. Moon, S.J., Köttgen, M, Jiao, Y., Xu, H and Montell, C. 2006. A taste receptor required for the caffeine response in vivo. *Curr. Biol.* 16, 1812-1817.
79. Montell, C. 2006. An exciting release on TRPM7. *Neuron* 52, 395-397.
80. Wang, T. and Montell, C. 2006. A phosphoinositide synthase required for a sustained light response. *J. Neurosci.* 26, 12816-12825.
81. Liu, C.H., Wang, T. Postma, M, Obukhov, A.G., Montell, C. and Hardie, R.C. 2007. *In vivo* identification and manipulation of the Ca^{2+} selectivity filter in the *Drosophila* Transient Receptor Potential channel. *J. Neurosci.* 27, 604-615.
82. Kwon, Y., Hofmann, T. and Montell, C. 2007. Integration of phosphoinositide- and calmodulin-mediated regulation of TRPC6. *Mol. Cell* 25, 491-503.
83. Wang, T., Jiao, J. and Montell, C. 2007. Dissection of the pathway required for generation of vitamin A and for *Drosophila* phototransduction. *J. Cell Biol.* 177, 305-316.
84. Venkatachalam, K. and Montell, C. 2007. TRP channels. *Ann. Rev. Biochem.* 76, 387-417.
85. Wang, T. and Montell, C. 2007. Phototransduction and retinal degeneration in *Drosophila*. *Pflügers Arch.* 454, 821-848.
86. Jiao, Y., Moon, S.J. and Montell, C. 2007. A *Drosophila* gustatory receptor required for the responses to sucrose, glucose, and maltose identified by mRNA tagging. *Proc. Natl. Acad. Sci. U.S.A.* 104, 14110-14115.
87. Montell, C. 2007. Dynamic regulation of the INAD signaling scaffold becomes crystal clear. *Cell* 131, 19-21.
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89. Wang, T., Wang, X., Xie, Q. and Montell, C. 2008. The SOCS box protein STOPS is required for phototransduction through its effects on phospholipase C. *Neuron* 57, 56-68.
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92. Montell, C. 2008. In search of the holy grail for *Drosophila* TRP. *Neuron.* 58, 825-827.
93. Kwon, Y, Shim, H.S., Wang, X. and Montell, C. 2008. Control of thermotactic behavior via coupling of a TRP channel to a phospholipase C signaling cascade. *Nat. Neurosci.* 11, 871-873.

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95. Venkatachalam, K., Long, A.A., Elsaesser, R., Nikolaeva, D., Broadie, K. and Montell, C. 2008. Motor deficit in a *Drosophila* model of mucopolipidosis type IV due to defective clearance of apoptotic cells. *Cell* *135*, 838-851. PMID: PMC2649760
96. Lee, Y., Moon, S.J. and Montell, C. 2009. Multiple gustatory receptors required for the caffeine response in *Drosophila*. *Proc. Natl. Acad. Sci. U.S.A.* *106*, 4495-4500.
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100. Elsaesser, R., Kalra, D., Li, R. and Montell, C. 2010. Light-induced translocation of *Drosophila* visual Arrestin2 depends on Rac2. *Proc. Natl. Acad. Sci. U.S.A.* *107*, 4740-4745.
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103. Hofmann, T., Chubanov, V., Chen, X., Dietz, A.S., Gudermann, T. and Montell, C. 2010. *Drosophila* TRPM channel is essential for the control of extracellular magnesium levels. *PLoS One* *5*(5), e10519.
104. Kwon, Y., Shen, W., Shim, H.S. and Montell C. 2010. Fine thermotactic discrimination between the optimal and slightly cool temperatures via a TRPV channel in chordotonal neurons. *J. Neurosci.* *30*, 10465-10471.
105. Venkatachalam, K., Wasserman, D., Wang, X., Li, R., Mills, E., Elsaesser, R., Li, H.S. and Montell, C. 2010. Dependence on a Retinophilin/myosin complex for stability of PKC and INAD and termination of phototransduction. *J. Neurosci.* *30*, 11337-11345.
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116. Venkatachalam, K, Wong, C.O. and Montell, C. 2013. Feast or famine: role of TRPML in preventing cellular amino acid starvation, *Autophagy* 9, 98-100.
117. Fowler, M.A. and Montell, C. 2013. *Drosophila* TRP channels and animal behavior. *Life Sci.* 92, 394-403.
118. Stefan, C.P., Zhang, N., Sokabe, T., Rivetta, A., Slayman, C.L., Montell, C., Cunningham, K.W. 2013. Activation of an essential calcium signaling pathway in *S. cerevisiae* by Kch1 and Kch2, putative low-affinity potassium transporters. *Eukaryot. Cell* 12, 204-214.
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124. Liman, E.R., Zhang, Y.V. and Montell, C. 2014. Peripheral coding of taste. *Neuron* 81, 984-1000. PMCID: PMC3994536
125. Venkatachalam K., Luo, J., Montell, C. 2014. Evolutionarily conserved, multitasking TRP channels: lessons from worms and flies. *Handb. Exp. Pharmacol.* 223, 937-962. PMCID: PMC4340696

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129. Akitake, B., Ren, Q., Bioko, N., Ni, J., Sokabe, T., Stockand, J.D., Eaton, B.A. and Montell, C. 2015. Coordination and fine motor control depends on *Drosophila* TRP γ . *Nat. Commun.* 6:7288. doi: 10.1038/ncomms8288. PMID: PMC4535187
130. Lee, Y., Moon, S.J., Wang, Y. and Montell C. 2015. A *Drosophila* gustatory receptor required for strychnine sensation. *Chem. Senses* 40, 525-533. PMID: PMC4580539
131. Walker, M.T., Rupp, A., Elsaesser, R., Güler, A.D., Sheng, W., Weng, S., Berson, D.M. Hattar, S. and Montell, C. 2015. RDGB2 is required for dim-light input into intrinsically photosensitive retinal ganglion cells. *Mol. Biol. Cell* 26, 3671-3678. PMID: PMC4603936
132. Chen, Z., Chen, H.C. and Montell, C. 2015. TRP and rhodopsin transport depends on dual XPORT ER chaperones encoded by an operon. *Cell Rep.* 13, 573-584. PMID: PMC4618092
133. Shim, J., Lee, Y. Jeong, Y.T., Jeong, Y.T., Kim, Y., Gee, M.G., *Montell, C. and *Moon, S.J. The full repertoire of *Drosophila* gustatory receptors for detecting an aversive compound. *Nat. Commun.* 6:8867. doi: 10.1038/ncomms9867. *co-corresponding authors
134. Walker, M. and Montell, C. 2016. Suppression of motor deficit in mucopolidosis type IV mice by bone marrow transplantation. *Hum. Mol. Genet.* (in press)
135. Zhang, Y.V., Aikin, T.J., Li, Z. and Montell C. 2016. The Molecular and cellular basis of food texture sensation in *Drosophila*. *Cell* (in revision)
136. Huang, J., Liu, W., Qi, Y., Luo, J. and Montell, C. 2016. Neuromodulation of male sexual activity through tyramine-responsive neurons in the *Drosophila* brain. *Curr. Biol.* (in revision)
137. Luo, J., Shen, W.L. and Montell, C. 2016. A mechanism for sensing the rate of temperature change in *Drosophila* larvae. *Nat. Neurosci.* (in revision)
138. Sokabe, T., Chen, H.S. and Montell, C. 2016. A switch in thermal preference in *Drosophila* larvae depends on multiple rhodopsins. *Cell Rep.* (in revision)
139. Ni, J., Baik, L.S., Holmes, T.C. and Montell, C. 2016. A rhodopsin in the brain functions in circadian photoentrainment in *Drosophila*. *Nature* (in revision)
140. Liu, C., Kim, S.H., Gurav, A. and Montell, C. 2016. Functions of opsins in *Drosophila* taste. *Cell* (in review).

Invited talks

1989 Carnegie Institution of Washington, Baltimore

1990 National Institutes of Health
 1990 International Congress of Eye Research, Helsinki
 1990 National Institutes of Health
 1991 University of Maryland, Baltimore County
 1991 Fox Chase, Philadelphia
 1991 National Eye Institute, Bethesda
 1991 FASEB Meeting, the Biology and Chemistry of Vision, Cooper Mountain
 1991 Molecular Neurobiology of *Drosophila* Meeting, Cold Spring Harbor-
 1991 National Institutes of Health, Bethesda
 1991 Special session at Cell Biology Meeting on unconventional myosins, Boston
 1993 Department of Cell Biology, Duke University
 1993 ICI Pharmaceuticals Wilmington, Delaware
 1993 Sensory transduction and Cell Physiology of Photoreceptors in Invertebrates, Regensburg, Germany
 1994 National Institutes of Health, Bethesda
 1994 Visual System Development, Asilomar, CA
 1995 Purdue University
 1995 Kushu University, Japan
 1995 Osaka University, Japan
 1995 Tokyo University, Japan
 1995 University of Tsukuba, Japan
 1995 International Conference on Receptor Regulated Calcium Influx, Asilomar, CA
 1995 FASEB Meeting on the Biology and Chemistry of Vision, Cooper Mountain, CO
 1995 IBC Conference, Philadelphia
 1996 National Institutes of Health, Bethesda
 1996 Vanderbilt University
 1996 British Pharmacological Society
 1996 University of Maryland, College Park
 1996 University of Maryland, Baltimore County
 1997 University of Chicago
 1997 University of Virginia
 1997 Zeneca Pharmaceuticals
 1997 Gordon Conference on Calcium Signaling, Oxford, UK
 1997 Dept. of Pharmacology and Pharmacy, University of Bath, UK
 1997 Ohio State University, Columbus
 1997 Dept. of Biology, California State University, Dominguez Hills
 1997 Myosin Family Reunion, The National Heart, Lung and Blood Institute (50th Anniversary Symposium)
 1997 University of North Carolina, Dept. of Physiology
 1997 National Institute of Environmental Health Sciences, Research Triangle, North Carolina
 1997 University of Maryland School of Medicine, Department of Physiology, Baltimore
 1998 Annual Jorge Chevesich Memorial Lecture, Albert Einstein College of Medicine
 1998 Harvard Medical School, Dept. of Developmental Biology
 1999 Cornell Medical College, Dept of Cell Biology
 1999 Yale Univ. School of Med., Dept. of Cell Biology
 1999 Rockefeller University
 1999 University of Saarland, Homburg, Germany
 1999 First International Workshop on Invertebrate Phototransduction, Jerusalem, Israel
 1999 North American Fibrosis Conference, Seattle

- 1999 Advances in Membrane Transport: Lessons from Model Organisms, NIDDK, Bethesda
- 1999 Special Session on MAGUKs and PDZs, American Society for Cell Biologists
- 2000 Carnegie Institution of Washington
- 2000 Molecular Biology Institute, UCLA
- 2000 FASEB Conference on Calcium and Cell Function, Copper Mountain, CO
- 2000 University of Hohenheim, Stuttgart, Germany
- 2000 University of Karlsruhe, Karlsruhe, Germany
- 2000 Freie Universität, Berlin, Germany
- 2001 Society for Experimental Biology, Symposium on "Model organisms: functional genomics of membrane transport".
- 2001 Department of Pharmacology and Toxicology, Karl-Franzens University of Graz, Austria
- 2001 Spatio-Temporal Interactions of Cellular Signalling Molecules, University of Saarland, Homburg, Germany
- 2001 FASEB conference on the Biology and Chemistry of Vision (Tuscon, AZ)
- 2001 Gordon Conference on Calcium Signaling, Oxford, UK
- 2001 Mucolipidin, TRP and Human Disease NIH Bethesda, MD
- 2001 International Workshop on Invertebrate Phototransduction, Bad Herrenalb, Germany
- 2002 Dept. of Physiology and Biophysics, Case Western Reserve University
- 2002 University of Colorado, Denver
- 2002 XII International Symposium on Calcium-Binding Proteins and Calcium Function in Health and Disease Cavalese, Italy
- 2002 FASEB Conference on Calcium and Cell Function, Salt Lake City, Utah
- 2002 NIDCD, Rockville, MD
- 2002 University of Oklahoma, Health Science Center, Interdisciplinary Seminar Program
- 2002 Department of Pathology, University of Alabama, Birmingham
- 2003 Novartis Foundation Symposium on Mammalian TRP Channels, London, England
- 2003 Dahlem Conference, Berlin, Retirement Symposium for Gunter Schultz
- 2003 XIX International Congress of Genetics, Melbourne, Australia
- 2004 National Institutes of Health
- 2004 Children's Hospital, Harvard Medical School
- 2004 International Conference on Brain Plasticity: From Neurobiology to Neurology, Heidelberg, Germany
- 2004 Experimental Biology, Washington DC
- 2004 Marburg University, Germany
- 2004 2nd colloquium on "Calcium and Transport Processes", Homburg Germany
- 2004 Symposium on Membrane Proteins, University of Montreal
- 2004 University of Texas, Southwestern Medical Center, Dallas, Dept. of Physiology
- 2004 Baylor College of Medicine, Houston, Molecular & Human Genetics
- 2004 University of Maryland School of Medicine, Program in Neuroscience
- 2004 University of Alabama, Dept. of Neuroscience
- 2004 Harvard University, Dept. of Molecular and Cellular Biology
- 2005 Duke University School of Medicine, Dept of Cell Biology
- 2005 Institute for Genetic Medicine, JHUSOM
- 2005 Harvard Medical School, Massachusetts Eye and Ear Infirmary
- 2005 NIH, National Heart, Lung and Blood Institute
- 2005 XXXV International Congress of Physiological Sciences, San Diego, CA
- 2005 14th Symposium on Ca²⁺ and Ca²⁺ Binding Proteins in Health and Disease, Banff, Canada
- 2005 FASEB conference on the Biology and Chemistry of Vision, Tuscon, AZ

- 2005 FEBS Congress and IUBMB Conference, Budapest Hungary
- 2005 **Keynote Lecture** (*The Pflügers Archive Lecture*): Symposium: TRP channels: unique players in cell function, Leuven, Belgium
- 2005 University of Pennsylvania, Department of Physiology
- 2005 University of Southern California, Neuroscience Program
- 2005 Molecular Physiology of Intracellular Calcium Signaling, Coorg, India
- 2006 Tufts University School of Medicine, Department of Physiology
- 2006 International Conference on "TRP channels and Ca²⁺ signaling", Eilat, Israel
- 2006 AChemS (Association for Chemoreception Sciences), Sarasota, Florida
- 2006 International Drosophila Conference, Kolymbari, Crete, Greece
- 2006 Cell and Molecular Biology of TRP channels, Bath, England
- 2006 Roche, Palo Alto. Neuroscience Group
- 2006 Stanford University, Neuroscience Institute Seminar Series
- 2006 Case Western Reserve, Department of Physiology and Biophysics
- 2007 Purdue University, Department of Biological Sciences
- 2007 University of Arizona, Department of Molecular and Cellular Biology
- 2007 University of Maine, Department of Biochemistry, Microbiology, and Molecular Biology
- 2007 **The Grass Traveling Scientist Distinguished Lecture**, UCLA, Brain Research Institute
- 2007 National Heart Lung and Blood Institute, Bethesda, MD
- 2007 4th symposium on "Calcium and Transport Processes", Homburg, Germany
- 2007 **Keynote Lecture**: Gordon Research Conference, Calcium Signaling
- 2007 National Cancer Institute, Frederick, MD
- 2007 **Keynote Lecture**: Keystone Symposium: The Transient Receptor Potential Ion Channel Superfamily, Breckenridge, Colorado
- 2007 NIH Ca²⁺ Day on Calcium Channels: New Developments and Open Problems, Bethesda, MD
- 2008 University of Maryland, Baltimore County, Biology Department.
- 2008 GI Core Center, Johns Hopkins University School of Medicine
- 2008 ISN Forefronts Symposium on Polycystic Kidney Disease, Montreal, Canada
- 2008 MRC, University of Leicester
- 2008 Karolinska Institute, Nobel Forum, Stockholm
- 2008 Symposium on Mucolipin Function in Disease, NIH/NHLBI, Bethesda, MD
- 2008 FASEB Conference on Calcium and Cell Function, Snowmass, CO.
- 2008 Brain Night, Brain Sciences Institute, Johns Hopkins University School of Medicine
- 2008 Department of Neurobiology, University of Massachusetts
- 2008 University of Texas, Southwestern Medical Center, Dallas, Dept. of Pharmacology
- 2008 **Plenary lecture**, American Society of Cell Biology, San Francisco, CA
- 2009 McKnight Brain Institute, University of Florida, Gainesville, FL
- 2009 Dept. of Molecular, Cellular, and Developmental Biology, University of Michigan
- 2009 Dept. of Physiology, Seoul National University College of Medicine, Seoul, Korea
- 2009 Yonsei University Medical Center, Seoul, Korea
- 2009 Korean Physiol. Society, Receptors and Channels as Therapeutic Targets, Sewon, Korea
- 2009 The CNR and CDD conference on Neurodegeneration, Rome, Italy
- 2009 Dept. of Biochemistry, Temple University School of Medicine, Philadelphia, PA
- 2009 NIH: Drosophila Neurobiology Interest Group
- 2009 TRP channels meeting: sensory signaling to human disease, Karolinska Institute, Stockholm
- 2009 Duke University Medical Center, Department of Pharmacology and Cancer Biology
- 2009 Yale University, Dept. of Cellular and Molecular Physiology
- 2009 16th Symposium on Ca²⁺ and Ca²⁺ Binding Proteins in Health and Disease, Pucón, Chile

- 2010 University of Maryland, School of Pharmacy, Baltimore
- 2010 The Radboud University Nijmegen Medical Centre, The Netherlands
- 2010 Duke University Medical Center, Department of Biochemistry
- 2010 Catholic University, Leuven, Belgium
- 2010 Carnegie Institution of Washington, Baltimore
- 2010 **Plenary lecture**, 51st Annual Drosophila Research Conference, Washington, DC
- 2010 Institute of Biophysics, Beijing, China
- 2010 Peking University, School of Life Science, Beijing, China
- 2010 Institute of Neuroscience, Chinese Academy of Sciences, Shanghai, China
- 2010 Neuro-signaling symposium, HUST, Wuhan, China
- 2010 TRP channels: from structure to disease, Leuven, Belgium
- 2010 Biology of Mosquito Vectors, JHMRI, Baltimore, MD
- 2010 FASEB Conference on Calcium and Cell Function, Steamboat Springs, CO
- 2010 Tata Institute for Fundamental Research, Mumbai, India
- 2010 *Drosophila* maggot meeting: from circuits to behavior, Bangalore, India
- 2010 Vanderbilt University, Neuroscience Seminar Series, Nashville
- 2010 Washington University, St. Louis, Department of Developmental Biology
- 2011 University of Iowa, Department of Anatomy and Cell Biology
- 2011 Columbia University, Department of Biological Sciences
- 2011 New York University, Department of Biology
- 2011 Baylor College of Medicine, Department of Neuroscience
- 2011 Institute of Neuroscience, Chinese Academy of Sciences, Shanghai, China
- 2011 Xi'an Jiaotong University School of Medicine, Xi'an, China
- 2011 Tsinghua University, Beijing, China
- 2011 17th Symposium on Ca²⁺ and Ca²⁺ Binding Proteins in Health and Disease, Beijing, China
- 2011 Genentech, South San Francisco, CA
- 2011 **Keynote lecture**, NIDA Symposium on Lipid Ligands, Receptors and TRPs, Durham, NC
- 2011 New Frontiers in Nobel Channels, Nijmegen, The Netherlands
- 2011 Stazione Zoologica, Naples, Italy
- 2011 Clinical Neurosciences, JHUSOM
- 2011 Brown University, Neuroscience Program, Providence, RI
- 2012 Gordon Research Conference: Photosensory receptors and signal transduction, Galveston
- 2012 MCDB Department, University of California, Santa Barbara
- 2012 Department of Biology, University of Virginia
- 2012 Department of Biology, University of Pennsylvania
- 2012 Johns Hopkins Malaria Research Institute, Bloomberg School of Public Health
- 2012 FASEB Conference on Calcium and Cell Function, Snowmass, CO
- 2012 Department of Neurobiology, University of Pennsylvania
- 2012 Yonsei University, Seoul, S. Korea
- 2012 Dept. of Life Science, Pohang Univ. of Science and Technology (POSTECH), Pohang, S. Korea
- 2012 New World of Anion and Cation Channels, Jeju Island, S. Korea
- 2012 Dept. of Neurobiology and Behavior, Stony Brook University, New York
- 2012 **Keynote lecture**, International Workshop on TRP Channels, Valencia
- 2012 Gill Neuroscience Symposium, Indiana University
- 2012 The Vollum Institute, Portland, OR
- 2013 Physiology Department, University of Texas Health Science Center at San Antonio
- 2013 Rockefeller University Friday Lecture Series
- 2013 Janelia Farm, Sensory Signaling in Model Organisms

- 2013 **Ebashi keynote lecture**, 18th International Symposium on Calcium Binding Proteins and Calcium Function in Health and Disease, Kiruna, Sweden
- 2013 Asia-Pacific Drosophila Research Conference
- 2013 FASEB Conference on the Biology and Chemistry of Vision
- 2013 NIDA Workshop: TRPs as Probes and Medications for CNS Disorders: Focus on the Trptome, Trptomics, Addiction and Pain, Bethesda, MD
- 2013 University of California, Riverside, Center for Disease Vector Research (CDVR)
- 2013 University of Calgary, ACHRI Developmental Biology and Genetics
- 2014 University of Southern California, Department of Biological Sciences
“Genetic Control of Animal Behavior and Decision Making in Drosophila”
- 2014 The 14th Hunter Meeting, New South Wales, Australia
“Decoding Sensory Perception and Decision Making”
- 2014 University of Georgia, Biochemistry Graduate Student Association
“Decoding Sensory Signaling and Animal Behavior in Drosophila”
- 2014 Cold Spring Harbor Laboratory
“Control of Animal Behavior and Decision Making with TRP Channels”
- 2014 Lorentz Center Workshop: Exploring the Biology of GPCRs, Leiden, Netherlands
“Unconventional Roles for Fly Rhodopsins in Sensory Signaling and Animal Behavior”
- 2014 SPG meeting: Sensory Transduction, MBL, Woods Hole, MA
“Polymodal sensing through rhodopsins and TRP channels”
- 2014 Thomas Vary Distinguished Lecture, The Pennsylvania State University College of Medicine
“Decoding the Sensory Receptors and Ion Channels Controlling Animal Behavior”
- 2014 Max Planck, Center of Advanced European Studies and Research, Bonn, Germany
“Polymodal Sensing through TRP Channels and Rhodopsins”
- 2014 Max Planck, Center of Advanced European Studies and Research, Bonn, Germany
“Taste Discrimination and Decision Making”
- 2014 National Institute of Biological Sciences (NIBS), Beijing, China
- 2014 ShanghaiTech-SAIS: Cellular Processing of Information, Shanghai, China
- 2014 Institute of Neuroscience, Shanghai, China
“Decoding the sensory receptors and ion channels controlling Drosophila behavior”
- 2014 Zhejiang University, Hangzhou, China
- 2015 Neuroscience Program, Academia Sinica, Taipei, Taiwan
- 2015 University of Texas, Southwestern Medical Center, Dallas, Dept. of Neuroscience
- 2015 Cold Spring Harbor Laboratory
- 2015 Gordon Research Conference, Chronobiology, Girona Spain
- 2015 Plenary talk, Southern California Fly Meeting, UC Irvine
- 2016 **Keynote lecture**, Cutting Edge Concepts in Molecular Pharmacology: GPCRs – G-proteins – TRP channels, Berlin-Dahlem, Germany
- 2016 Ludwig Maximilians-Universität, München, Germany
- 2016 Department of Microbiology and Molecular Genetics at University of California, Irvine
- 2016 Yale University, Dept. of Cellular and Molecular Physiology

Teaching at UCSB

- 2014 Winter - present MCDB 266 / 126BH Literature in Neurobiology
- 2014 Spring - present MCDB 233 Signal Transduction
- 2015 Winter - present MCDB 152/Neurobiology I

Teaching outside courses

- 1996 Lecturer at Cold Spring Harbor Course on Neurobiology of *Drosophila*
- 2009 Lecturer at Cold Spring Harbor Course on Neurobiology of *Drosophila*
- 2010 Master class: TRP channels in Health and Disease
(The Radboud University Nijmegen Medical Centre, Belgium)
- 2014 Guest lecturer: Santa Barbara Community College (Biology 104 – Mol. Biol.)
- 2014 Cold Spring Harbor Laboratory: Course on Ion Channels and Synaptic Transmission
- 2015 Cold Spring Harbor Laboratory: Course on Ion Channels and Synaptic Transmission

Teaching at Johns Hopkins University

- 1989 - 1991 Medical School Biochemistry Course Conferences
- 1991 - 1995 Medical School Molecules and Cells Course (Molecular Biology and Genetics)
- 1991 - 1992 Current Topics in *Drosophila* Research
- 1992 - 2006 Graduate Principles of Genetics Course
- 1992 - 1995 Graduate Biochemistry and Cell Biology Course
- 1993 - 2012 Cellular and Molecular Biology of Photoreceptors in Health and Disease
- 1994 - 1996 Neuroscience Course for Medical Students (Discussion Section Leader)
- 1997 Molecular Genetics of Retinal Disease (organizer)
- 1997 Techniques in Neurobiology
- 1999 - 2000 Current Techniques in Biological Chemistry
- 2007 - 2012 Molecular Entomology Course
- 2007 - 2012 Ethics in Science for Biological Chemistry Students
- 2007 Core Discussion for Principles of Genetics
- 2008 Introduction to Biomedical Research and Careers (Undergraduate course, JHU)
- 2009 - 2012 Cellular and Molecular Biology of Sensation (Undergraduate course, JHU)

Public service

- 2009 Reach MD satellite radio interview by Dr. Leslie Lundt on possible treatments for children with mucopolipidosis type IV (Jan. 2009)
- 2010 National Public Radio interview by Joe Palca on light detection in larvae
- 2010 National Public Radio interview by Whitney Blair Wyckoff on insect repellents
- 2010 CBS Radio interview by Scott Saloway (Aug. 25) on insect repellents
- 2013 Lecture at the Santa Barbara Museum of Natural History
- 2013 National Public Radio interview by Audie Cornish on DEET insect repellent
- 2014 Chancellor's Community Breakfast (University Club)
- 2014, 2015 GRIT talk: Research mentorship program for high school students at UCSB
- 2015 Cooke Bridges Talk: Program targets first generation community college students to increase interest in STEM majors
- 2015 Talk to UCSB undergraduate summer research interns in Materials Research Laboratory program
- 2015 Keynote talk at UC Santa Barbara Foundation Board of Trustees

UCSB Committees and Activities

- 2013 - MCDB Development and Public Relations Committee
- 2013 Faculty Promotion Ad hoc Committee
- 2013- Advisory Committee, Neuroscience Research Institute, UCSB
- 2014 Judge for Grad Slam
- 2014 Reviewer for Crowe Family Research Scholar Fellowships
- 2014, 2015 Faculty Promotion Ad hoc Committee

2014	BMSE Graduate Admission Committee
2014-2015	Chair, Neuroscience Faculty Search Committee for both MCDB and MLPS
2015-present	Director and Principal Investigator, UCSB MARC program (Maximizing Access to Research Careers, Center for Science and Engineering Partnerships)
2015	Co-chair, Breakthroughs in Systems Neuroscience, Loma Pelona Center, UCSB

External Professional Activities (National and International)

1994	NIH Study Section, VISC Ad hoc member
1995	NIH Study Section, VISC Ad hoc member
1996	NIH Study Section, VISC Ad hoc member
1996	Lecturer at Cold Spring Harbor Course on Neurobiology of <i>Drosophila</i>
1998	NIH Study Section, BIOL-1 Ad hoc member
1998	NIH Study Section, VISC Ad hoc member
2000	NIH Study Section, NCI SRG Subcommittee C, Ad hoc member
2000 – 2004	Consultant: Neurogenetics Inc., San Diego, CA
2001	NIH Study Section, NCI SRG Subcommittee C, Ad hoc member
2001	NIH intramural site visit panel, NCI, Laboratory of Biochemistry,
2001	Co-organizer of Conference on Mucolipin, TRP and Human Disease NIH Bethesda
2002	Co-chair of FASEB Conference on Calcium and Cell Function, Salt Lake City
2001 – present	Faculty of 1000
2004	Chair of FASEB Conference on Calcium and Cell Function, Snowmass, Colorado
2004	Editor, (Special Issue) Current Opinion in Cell Biology
2004	External Reviewer for Gene Therapy and Therapeutics Branch, NIDCR, NIH
2005- 2015	Organizing Committee: International Symposium on Ca ²⁺ -signaling/Ca ²⁺ Binding Proteins
2006	NIH intramural site visit panel, NCI
2007	Co-chair of Keystone Conference on TRP channels, Breckenridge, CO
2007	NIH Study Section, HIBP Ad hoc member
2008	NIH Study Section, Neurobiophysical Topics, MDCN-C, Ad hoc member
2008	NIH Study Section, Biophysical and Biochemical Sciences Fellowships, Ad hoc member
2009	Lecturer at Cold Spring Harbor Course on Neurobiology of <i>Drosophila</i>
2009	NIH Study Section, Molecular and Integrative Signal Transduction (MIST), Ad hoc member
2009	Co-chair, TRP Channels, From Sensory Signaling to Human Disease, Karolinska Institute, Stockholm, Sweden
2009	NIH Study Section, Sensorimotor Integration Study Section, Ad hoc member
2009 – 2015	Medical Advisory Board, Mucopolidosis IV Foundation
2010	NIH Study Section, Sensorimotor Integration Study Section, Ad hoc member
2010	NIH, NHLBI, intramural review of research program
2011	External reviewer European Research Counsel (ERC)
2012	NIH, NIEHS, intramural review of Laboratory of Neurobiology
2012	Reviewer for the Research Council of Catholic University, Leuven
2012	NIH, NIDCR, intramural review of research program
2012	Reviewer for the Samsung Biomedical Research Institute
2013	Co-Chair, Janelia Farm Conference on Sensory Signaling in Model Organisms

Johns Hopkins Committees and Activities

1989	Coorganizer of First Annual BCMB Graduate Conference
1990 - 1992	Medical School Council
1990 - 1992	BCMB Graduate Admissions
1990 - 1995	BCMB steering committee
1991 - 1995	Coordinator for BCMB student seminars
1990 - 1992	Coordinator for Biological Chemistry Seminars
1990	Faculty search committee
1994 - 1999	Director of the Biological Chemistry (BC) Graduate Program
1997 - 2006	M.A. & Ph.D. programs committee
1998 - 1999	Technology transfer advisory committee
1999 - 2000	Interim Director of the BCMB Graduate Program
2000 - 2006	Director of the BCMB Graduate Program
2005 - 2007	Chair of BC Department Seminar Program Committee
2005 - 2012	Steering Committee for Postdoctoral Fellows
2009 - 2010	JHUSOM Biological Chemistry faculty search committee
2010	Organizer of LEM Symposium to honor the careers of M. Daniel Lane, Albert Mildvan and Paul Englund
2010 - 2011	Chair, JHUSOM Biological Chemistry faculty search committee
2011 - 2012	Co-Director for Admissions, BC Graduate Program

Editorial Board

2006 – 2014 Executive Editor: *Pflügers Archiv* European Journal of Physiology

Reviewed for the following journals

American Journal of Physiology
 Biochimica et Biophysica Acta
 Biochemistry
 BioEssays
 BioTechniques
 Cell
 Cell Metabolism
 Cell Reports
 Circulation Research
 Current Biology
 Current Eye Research
 Development
 Development, Genes & Evol.
 Developmental Biology
 Developmental Cell
 eLife
 EMBO Journal
 EMBO Reports
 European Journal of Cell Biology
 European Journal of Neuroscience
 European Journal of Physiology
 Experimental Eye Research

FASEB J
 FEBS Letters
 Fly
 Gene
 Genes & Development
 Genetics
 Immunity
 Journal of Biological Chemistry
 Journal of Cell Biology
 Journal of Cell Science
 Journal of Comparative Neurology
 Journal of Comparative Physiology A
 Journal of Experimental Biology
 Journal of General Physiology
 Journal of Membrane Biology
 Journal of Neurobiology
 Journal of Neurochemistry
 Journal of Neuroscience
 Journal of Physiology
 Journal of Visualized Experiments (JoVE)
 Life Sciences
 Molecular and Cellular Biology
 Molecular Biology and Evolution
 Molecular Biology of the Cell
 Molecular Cell
 Nature
 Nature Cell Biology
 Nature Communications
 Nature Neuroscience
 Neuron
 Pflügers Arch.
 PLoS One
 PLoS Genetics
 PLoS Biology
 Proc. Natl. Acad. Sci.
 Science
 Scientific Reports
 Trends in Cell Biology
 Trends in Pharmacological Sciences

Faculty mentor

Dr. Mark Wu (K08 Award) 2008-2013

Provided evaluations for faculty promotions to the following institutions

Cambridge University
 Dartmouth College
 Duke University School of Medicine
 Georgetown University

Johns Hopkins University
 Johns Hopkins University School of Medicine
 Harvard University
 Institute of Neuroscience, Shanghai, China
 Katholieke Universiteit, Leuven, Belgium
 National Cancer Institute
 National Institute of Environmental Health Sciences
 New York University
 Northwestern University School of Medicine
 Ohio State University
 Peking University
 Penn State University
 Rutgers, The State University of New Jersey
 Scripps Research Institute
 Stanford University Medical Center
 University of California, Riverside
 University of California, San Diego
 University of Colorado Health Sciences Center, Denver
 University of Connecticut
 University of Georgia
 University of Maryland School of Pharmacy
 University of Massachusetts
 University of Michigan
 University of Nevada, School of Medicine
 University of Oklahoma Health Sciences Center
 University of Notre Dame
 University of Pennsylvania Medical Center
 University of Pittsburg
 University of Southern California
 University of Texas, Southwestern Medical Center
 University of Utah
 Vanderbilt University
 Wayne State University, College of Science
 Yale School of Medicine

Current Lab Members (Predoctoral and Postdoctoral Trainees)

LAB MEMBER	Pre/ Post	Period	Degree	Year	Institution	Project title
Jinfei Ni	Pre	2009-present	M.S.	2009	University of Connecticut	<i>Drosophila</i> circadian rhythms
Junjie Luo	Pre	2009-present	B.S.	2008	Tsinghua University	Temperature selection in <i>Drosophila</i>
Takaaki Sokabe	Post	2010-present	Ph.D.	2004	University of Tokyo	Temperature selection in <i>Drosophila</i>
Zijing Chen	Post	2010-present	Ph.D.	2010	ION, Shanghai	Regulation of TRP in photoreceptor cells
Hsiang-Chin Chen	Post	2012-present	Ph.D.	2012	UMDNJ-Robert Wood Johnson	Temperature selection in <i>Drosophila</i>

					Medical School	
Weiwei Liu	Post	2012-present	Ph.D.	2012	Beijing University	Regulation of <i>Drosophila</i> feeding behavior
Yijing Wang	Post	2013-present	Ph.D.	2013	NIBS, Beijing	Courtship driven behaviors in flies
Yali V. Zhang	Post	2013-present	Ph.D.	2013	JHUSOM	Gustatory reception in <i>Drosophila</i>
Chao Liu	Post	2014-present	Ph.D.	2014	Vanderbilt University	Role of rhodopsins in chemosensation
Nicole Leung	Pre	2014-present			Occidental College	Novel mechanisms regulating rhodopsins
Nick DeBeaubien	Pre	2014-present			UCSD	Activation of TRPs by endocannabinoids
Jiangqu Liu	Post	2014-present	Ph.D.	2014	Institute of Biophysics	Identification of THC receptors in <i>Drosophila</i>

Past Predoctoral and Postdoctoral Trainees

Total trainees: predoctoral: 15; postdoctoral: 13

Trainee	Pre/Post	Training Period	Degree	Year	Institution (Highest)	Current Position and Address
Hideyuki Okano	Post	1989-1991	MD/PhD	1988	Keio University School of Medicine	Professor Department of Physiology Keio Univ. School of Medicine
Julie Blendy	Post	1989-1991	PhD	1989	Georgetown University	Professor Dept. of Pharmacology University of Pennsylvania
Jeffrey A. Porter	Pre	1987-1993	PhD	1993	JHUSOM	Vice President of Research and Head of Developmental & Mol. Pathways; Novartis Corporation
Wen-Cheng Xiong	Pre	1989-1994	PhD	1994	JHUSOM	Professor Dept. of Neurology & IMMAG Medical College of Georgia
Makoto Nakamura	Post	1991-1994	PhD	1990	Matsuyama University	Associate Professor Matsuyama University Ehime, Japan
Andrew J. Kreuz	Post	1994-1997	PhD	1993	Ohio State University	Professor Dept. of Biology Stevenson University Stevenson, MD
Paul D. Wes	Pre	1993-1998	PhD	1998	JHUSOM	Senior Scientist Lundbeck Research Paramus New Jersey

Xian-Zhong (Shawn) Xu	Pre	1996-2000	Ph.D.	2000	JHUSOM	Associate Professor of Physiology Life Sciences Institute University of Michigan
Hong-Sheng Li	Post	1997-2002	PhD	1996	Univ. of Mass.	Associate Professor Department of Neurobiology University of Massachusetts Medical School Worcester, MA 01655
Seung-Jae Lee	Pre	1998-2003	PhD.	2003	JHUSOM	Associate Professor POSTECH (Pohang University of Science and Technology) Pohang, Republic of Korea
Thomas Hofmann	Post	2002-2004	MD	2002	Free University of Berlin	Lecturer Institut für Pharmakologie und Toxikologie, Phillips-Universität Marburg, Germany
Terry Watnick	Post	1999-2004	MD	1987	Yale Univ. School of Med.	Associate Professor Dept. of Medicine University of Maryland School of Medicine Baltimore, MD 21201
Hong Xu	Pre	1998-2005	Ph.D.	2005	JHUSOM	Principal Investigator NIH/NHLBI Bethesda, MD
Tao Wang	Pre	2000-2007	Ph.D.	2005	JHUSOM	Assistant Professor National Institute of Biological Sciences (NIBS) Zhongguancun Life Science Park Changping District Beijing P.R.China 102206
Seok Jun Moon	Pre	2003-2008	Ph.D.	2008	JHUSOM	Associate Professor Department of Oral Biology Yonsei Univ. College of Dentistry Seoul, Korea
Young Kwon	Pre	2002-2008	Ph.D	2008	JHUSOM	Asst. Professor (from summer '15) Biochemistry Dept. University of Washington
Rebecca Elsaesser	Post	2004-2007	Ph.D.	2004	Hohenheim Univ., Germany	Product Manager Carl-Zeiss-Promenade 10, 07745 Jena, Germany
Michael Köttgen	Post	2004-2009	MD	1997	Albert-Ludwigs-University	Professor Dept. of Exper. Nephrology

						Albert-Ludwigs- University Freiburg, Germany
Yuchen Jiao	Pre	2003-2009	Ph.D.	2009	JHUSOM	Assistant Professor Peking Union Medical School Beijing, China
Qiuting Ren	Pre	2002-2010	Ph.D.	2010	JHUSOM	Product Manager New England Biolabs 240 County Road Ipswich, MA 01938
Kartik Venkatachalam	Post	2003-2010	Ph.D.	2002	University of MD, Baltimore	Assistant Professor University of Texas, Medical School, Houston, TX
Xiaoyue Wang	Pre	2004-2009	Ph.D.	2009	JHUSOM	Assistant Professor Peking Union Medical School Beijing, China
Youngseok Lee	Post	2006-2012	Ph.D.	2006	Kor. Adv. Instit. of Sci & Tech.	Assistant Professor Kookmin University Seoul, Korea 136-702
Melissa A. Fowler	Post	2009-2012	Ph.D.	2009	University of Texas, Health Science Center	Technical Application Scientist Senomyx San Diego, CA 92121
Deepak Kalra	Pre	2006-2012	Ph.D.	2012	JHUOM	Clinical Fellow Epilepsy, Neurological Institute at the Cleveland Clinic
Wei L. Shen	Pre	2007-2013	Ph.D.	2013	JHUSOM	Assistant Professor ShanghaiTech University
Sang Hoon Kim	Pre	2007-2013	Ph.D.	2013	JHUSOM	Postdoctoral fellow JHUSOM
Yali V. Zhang	Pre	2007-2013	Ph.D.	2013	JHUSOM	postdoc in C. Montell lab UCSB
David Ronderos	Post	2011-2013	Ph.D.	2013	Univ. of Texas Southwestern Medical Center	Asst. Professor University of Mary Bismarck, ND
Jia Huang	Post	2011-2014	Ph.D.	2008	Tottori, University, Japan	Asst. Professor Zhejiang University
Zhengzheng Li	Post	2010-2013	Ph.D.	2010	Institute of Biophysics, Beijing	Postdoctoral fellow Johns Hopkins University SOM
Bradley Akitake	Post	2008-2016	Ph.D.	2008	UM College Park	Staff Scientist NIMH/NIH
Marquis Walker	Post	2008-2016	Ph.D.	2008	University of MD, Balt. County	Asst. Professor James Madison University

Awards to members of the lab

TRAINEE	AWARD	YEAR
Julie Blendy	NIH Postdoctoral Fellowship	1990-1991
Makoto Nakamura	Human Frontiers Postdoctoral Fellowship	1992-1994
Andy J. Kreuz	NIH Postdoctoral Fellowship	1994-1997
Paul D. Wes	1) HHMI Predoctoral Fellowship 2) The Paul Ehrlich Award (a JHUSOM award for Ph.D. work)	1994-1999 1998
Fabian Moebius	Human Frontiers Postdoctoral Fellowship	1998-2000
Xian-Zhong (Shawn) Xu	1) The Michael A Shanoff Award (JHUSOM Award for the top Ph.D. thesis) 2) The Harold Weintraub Award	2000 2001
Hong-Sheng Li	The Albert Lehninger Postdoctoral Award (JHUSOM Award)	2001
Thomas Hofmann	Human Frontiers Postdoctoral Fellowship	2002-2005
Seung-Jae Lee	The Mette Strand Award (a JHUSOM award for Ph.D. work)	2003
Michael Köttgen	1) PKD Foundation Postdoctoral Fellowship 2) PKD Foundation Young Investigator Career Development Award	2005-2007 2008-2010
Tao Wang	The Paul Ehrlich Research Award (a JHUSOM award for Ph.D. work)	2006
Youngseok Lee	Korea Research Foundation Postdoctoral Fellowship	2006-2007
Young Kwon	1) The Paul Ehrlich Research Prize (a JHUSOM award for Ph.D. work) 2) Tom Elkins Memorial Award, Neurobiology of <i>Drosophila</i> Conference, Cold Spring Harbor	2007 2009
Deepak Kalra	American Heart Assoc. Predoctoral Fellowship	2008-2010
Sang Hoon Kim	Samsung Scholarship	2007-2011
Bradley Akitake	NIH Postdoctoral Fellowship	2009-2012
Kartik Venkatachalam	Daniel Nathans Postdoctoral Award (a JHUSOM award)	2009
Yuchen Jiao	The Hans Joaquim Prochaska Research Award (a JHUSOM award for Ph.D. work)	2009
Marquis Walker	NIH Postdoctoral Fellowship	2010-2012
Xiaoyue Wang	The Hans Joaquim Prochaska Research Award (a JHUSOM award for Ph.D. work)	2010
Takaaki Sokabe	Japanese Society for the Promotion of Science (JSPS) Postdoctoral Fellowship	2010-2012
Youngseok Lee	The A. McGehee Harvey Postdoctoral Award (a JHUSOM award)	2011
David Ronderos	NIH Postdoctoral Fellowship	2012-2014
Takaaki Sokabe	The Uehara Memorial Foundation Postdoctoral Fellowship	2013
Wei L. Shen	Paul Erlich Award (a JHUSOM award for Ph.D. work)	2013
Yali Zhang	David I. Macht Award (a JHUSOM award for Ph.D. work) Polak Young Investigator Award (ACChemS)	2013 2014

Ph.D. Thesis Committees

Student	Advisor	Department/Program/University
Steve Doberstein	Thomas Pollard	BCMB/JHUSOM
David Bredt	Solomon Snyder	Neuroscience/JHUSOM

Ying Chen	Min Li	Neuroscience/BCMB/JHUSOM
Allison Doyle	Janice Evans	School of Public Health/JHU
Ali Güler	Michael Caterina	Biol. Chem./BCMB/JHUSOM
Shu-Ching Hu	Anirvan Ghosh	Neuroscience/JHUSOM
Hyosang Lee	Michael Caterina	Biological Chemistry/JHUSOM
Geoffrey Pitt	Peter Devreotes	Biol. Chem./BCMB/JHUSOM
Damian van Rossum	Donald Gill	Biochemistry Dept., Univ. of MD
Zhang Lan	Gregory Germino	Medicine/CMM/JHUSOM
Jean-Ju Chung	Min Li	Neuroscience/BCMB
Ryan McCully	Joel Pomerantz	Biol. Chem./BCMB/JHUSOM
Stephanie Carlson	David Berson	Neuroscience/Brown University
Joong Youn Cho	Alex Kolodkin	Neuroscience/JHUSOM
Tiffany Link	Michael Caterina	Biol. Chem./BCMB/JHUSOM
Katherine Murnen	Elizabeth Chen	Mol. Bio. & Gen./BCMB/JHUSOM
Stephanie Lew	Joel Pomerantz	Biol. Chem./BCMB/JHUSOM
April Clayton	George Dimopoulos	MMI-SPH/BCMB/JHUSOM
Rakhi Jattani	Joel Pomerantz	Biol. Chem./BCMB/JHUSOM
Chun-Chieh Lin	Chris Potter	Neuroscience/JHUSOM
Shuzhen Sim	George Dimopoulos	MMI-SPH/BCMB/JHUSOM
Brett Cook	Les Wilson/Stu Feinstein	MCDB/BMSE/UCSB
Desmond Ramirez	Todd Oakley	EEMB/UCSB

Current research support to Craig Montell:

<u>Project</u>	<u>Dates/Annual Direct Costs</u>	<u>Effort (ca. mos.)</u>
5 R01-GM085335-09 (1.0 percentile score) NIH/NIGMS TRPA1: a polymodal sensor for aversive stimuli	05/05/12 – 03/31/16 \$200,000/yr	0.6
*5 R01-DC007864-10 (8.0 percentile score) NIH/NIDCD Molecular genetics of contact chemosensation *Competitive renewal of this award received a 4.0 percentile score	07/01/11 – 06/30/16 \$212,000/yr	1.6
*5 R01-EY08117-25 (9.0 percentile score) NIH/NEI Rhodopsins: from biosynthesis and degradation to unconventional functions. *Competitive renewal of this award received a 1.0 percentile score	05/01/12 – 04/30/16 \$245,000/yr	1.824
5 R01-EY10852-22 (3.0 percentile score) NIH/NEI Regulation of TRP channels and visual transduction	05/01/13 – 4/30/17 \$245,000/yr	1.824
1DP1AI124453-01 (no % score given; 11 impact score) NIH Pioneer Award Creation of a new generation of transgenic mosquitoes to control infectious disease	9/30/15 – 7/31/20 \$500,000/yr	6.12

Previous funding:

NIH institutional award *Structure/function analyses of the ninaC gene*. 8/1/88 - 3/31/89. Total direct costs awarded were \$9,929.

US-Israel Binational Science Foundation-BSF-88-00497 *Analysis of inositol lipid signalling in Drosophila mutants*. 9/1/89 -9/1/94. This is a joint award with Dr. Zvi Selinger and is intended to foster collaborations between US and Israeli scientists. Total direct costs for supplies for the Montell lab are \$5,000. In addition \$5,500 was awarded for two trips to Israel.

ACS institutional award *Molecular genetics of ninaC: studies of the myosin domain*. 10/1/88 - 9/30/89. Total direct costs awarded were \$10,000.

ACS-NP-675 *A molecular genetic approach to signal and energy transduction in Drosophila photoreceptor cells*. 50% effort. Direct costs awarded for the period of 1/1/89-12/31/90 was \$144,00. This award was terminated 3/31/90 since it overlapped with NIH - 5R01 EY08117. Total direct costs used were \$18,000.

NIH - 5R01 EY08117 *Mutagenesis of ninaC: A Drosophila neural kinase/myosin*. 4/1/89 - 3/31/94. Total direct costs were \$502,366.

NIH institutional award *Isolation of Drosophila vision genes by P-element insertion mutagenesis*. 5/1/89 - 4/30/90. Total direct costs awarded were \$3,679.

NSF - BNS-8957015 Presidential Young Investigator Award. 7/1/89 - 6/30/94. This award is intended to fund pilot projects to enable junior faculty to develop new projects which could then be funded by grant support. Total direct costs were \$284,090.

ACS Junior Faculty Research Award JFRA-292. 7/1/90 - 6/30/93. Total direct costs were \$90,500.

ACS-NP-798 *Molecular Genetics of the Drosophila Phototransduction mutants spike and repo*. 1/1/92 - 12/31/93. Total direct costs were \$144,000.

NIH-1R01 EY10852-01 *TRP: a novel calcium channel required in fly vision*. 1/1/95-12/31/97. Total direct costs were \$328,771.

Zeneca Pharmaceuticals (Wilmington, Delaware) The funds were donated by Zeneca to support research on the vertebrate TRPC genes. 6/1/95-5/31/98 Total direct costs were \$80,853.

NIH-2R01 EY08117-06 *Molecular genetics of ninaC: a Drosophila kinase/myosin*. 4/1/94 - 3/31/99. Total direct costs were \$867,150.

NIH-2R01 EY08117-11 *Control of a G-protein cascade by a PDZ domain protein*. 4/1/99 - 3/31/03. Total direct costs were \$850,402.

NIH-2R01 EY10852-04 *The TRP channel signaling complex and its roles in vision*. 1/1/98-12/31/02. Total direct were \$805,438.

NIH/NIDDK 5 P50 DK57325-03 Functional analyses of dPKD2 *in vitro* and *in vivo*. 09/01/99 – 08/31/05. Total direct were \$120,000.

NIH/NIGMS T32 GM07445-26 Biochemistry, Cellular and Molecular Biology Program. 07/01/02-06/30/07. Total direct were \$8,677,355

Mucopolipidosis Foundation *Molecular and biophysical characterization of the mucolipins*. 12/1/02 – 11/30/05. Total direct were \$50,000

The Blaustein Pain Research Fund. *Molecular genetic model of thermosensation*. 01/01/06 – 12/31/06.
Total direct were \$20,000

NIH 2R01 EY10852-10 (0.6 percentile score). TRP channels and their roles in visual transduction. 1/01/03 – 12/31/07. Total direct were \$1,250,000.

NIH 5 R01-EY08117-16 (3.9 percentile score). Dynamic regulation of a G-protein signaling complex. 04/01/03 - 03/31/08. Total direct were \$1,250,000.

March of Dimes FY06-362 Molecular genetic model of TRPML and the neurodegenerative disease MLIV. 06/01/06 – 05/31/09. Total direct costs were \$301,151.

NIH GM085335 Supplement for postdoctoral fellow. 06/01/09 – 05/31/10. Total direct costs were \$40,078.

ARRA supplement EY08117. 08/01/09 – 07/30/10. Total direct costs were \$71,932/yr

Bill and Melinda Gates Foundation Grand Challenges Explorations II 53126 05/01/09 – 10/30/10. Total direct costs were \$100,000.

NIH-5 R01-DC007864-05 (5.7 percentile score) NIDCD. Molecular Genetics of Taste Transduction. 07/01/06 – 06/30/11. Total direct costs were \$924,991.

ARRA supplement GM085335. 09/01/09 – 07/31/11. Total direct costs were \$95,000/yr

NIH 5 R01-GM085335-04 (13.0 percentile score) NIGMS. Molecular genetics of thermotaxis. 05/05/08 – 03/31/12. Total direct costs were \$802,541.

NIH 5 R01-EY08117 (2.6 percentile score). Genetic models of retinal degeneration. 04/01/08 – 03/31/12. Total direct costs were \$985,100.

March of Dimes FY09-423 TRPML cation channels and mucopolidosis. 06/01/09 – 05/31/12. Total direct costs were \$299,200.

Johns Hopkins Malaria Research Institute. New Insect Repellents to Control Insect-borne Disease. 09/1/10 – 08/31/12. Total direct costs were \$150,000.

NIH 5 R01-EY10852-18. (3.4 percentile score). Regulation of TRP channels and visual transduction by PIs. 1/01/08 – 12/31/12. Total direct costs were \$1,125,000.

March of Dimes FY12-423. Testing a therapeutic approach for the childhood neurodegenerative disease MLIV using a mouse model. 06/01/12 – 05/31/15. Total direct costs were \$312,396.

NIH/NIGMS 1T34GM113848. UC Santa Barbara MARC Program: Bridges to Biomedical Research Careers. 06/01/15 – 05/31/20. Total direct costs: \$173,978/yr. Transferred Directorship to Dr. Joel Rothman after receiving NIH Pioneer Award.

Research support to others in laboratory:

Julie A. Blendy

NIH postdoctoral fellowship. *The molecular genetics of ninaC: a putative myosin/kinase*. 4/1/90 - 3/31/93. Total direct costs awarded were \$69,000. This award was terminated on 6/1/91 when Dr. Blendy left the laboratory.

Makoto Nakumura

International Human Frontier Program Postdoctoral Fellowship. *Molecular genetic analysis of spike: a Drosophila neural RNA-binding protein*. 4/1/92 - 3/31/94. Total direct costs: \$82,870.

Andrew J. Kreuz

NIH postdoctoral fellowship. *Analysis of the Drosophila retinal kinase/myosin*. 5/1/94 - 4/30/97. Total direct costs were \$74,908.

Paul Wes

HHMI predoctoral fellowship 6/1/94 - 5/31/99. Total direct costs: stipend, \$70,000; cost of education allowance, \$63,500.

Fabian Moebius

International Human Frontier Program Postdoctoral Fellowship. *Receptor operated cation channels of the plasma membrane*. 8/1/98 - 7/31/00. Total direct costs: \$77,400.

Thomas Hofmann

International Human Frontier Program Postdoctoral Fellowship. *The physiological role of melastatin-like channels (TRPMs) in cell function and development*. 12/1/02— 11/30/05. Total direct costs: \$126,000.

Michael Köttgen

PKD foundation. *TRPP signaling in Drosophila melanogaster*. 7/1/05 – 6/30/07. Total direct costs: \$100,000.

Kartik Venkatachalam

MLIV Foundation. *Drosophila as a model for MLIV*. 7/1/07 – 6/30/08. Total direct costs: \$40,000.

Michael Köttgen

PKD Foundation: Young Investigator Career Development Award. 7/1/08 – 6/30/10 *Polycystin signaling in Drosophila melanogaster*. Total direct costs: \$130,000.

Deepak Kalra

American Heart Association Predoctoral Fellowship. 7/1/08 – 6/30/10. Regulation of TRP channel trafficking and function by a novel transmembrane protein. Total direct costs: \$40,000.

Sang Hoon Kim

Samsung Scholarship. 9/1/2007 – 8/31/2011. Total direct costs: \$200,000.

Marquis Walker

Visual Neuroscience Training Program. 6/1/08 – 5/31/09. Rhodopsin as an intrinsic thermosensor.

Bradley Akitake

NIH postdoctoral fellowship. *TRP Channel Function in Drosophila Mechanosensation and Proprioception*. 6/1/09 – 5/31/12. Total direct costs: \$148,974.

Marquis Walker

NIH postdoctoral fellowship. Pathophysiology and potential therapy for a childhood neurodegenerative disease. 9/16/10 – 9/15/12. Total direct costs: \$102,628

David Ronderos

Visual Neuroscience Training Program. 11/1/11 – 10/31/12. A model for a visual cycle that functions in concert with a bistable photopigment

David Ronderos

NIH postdoctoral fellowship (F32 EY022539). Molecular mechanisms of retinal degeneration and the visual cycle in *Drosophila*. 12/1/12 – 11/30/14. Total direct costs: \$101,404.

Undergraduate Projects Directed

Student	Institution	Project	Years
Atish Choudhury	JHUSOM	Characterizing the <i>Drosophila</i> signalplex in the retina.	1996-1997
Fred Chien	JHUSOM	Analysis of the TRPg channel.	1997-1998
Stewart Morgan	JHUSOM	<i>Drosophila</i>	1996-1998
John Jun	JHUSOM	Characterization of a retinal dehydrogenase in fly vision.	2000-2002
Lauren Xu	JHUSOM	Analysis of the rhodopsin cycle in <i>Drosophila</i> .	2000-2002
Yamini Krishnan	JHUSOM	A fly model for PKD.	2002-2005
Ran Ma	JHUSOM	Characterization of fly TRP channels.	2005-2006
Eunice Choi	JHUSOM	Characterization of fly TRP channels.	2005-2006
Lisa Carey	JHUSOM	Characterization of fly TRP channels.	2006-2009
Daria Nikolaeva	JHUSOM	A fly model for MLIV	2006-2009
Esther Shin	JHUSOM	Examining the roles of TRP channels in circadian rhythms.	2007-2010
Marvin Liyanage	UCSB	Calmodulin regulation of TRP in fly phototransduction.	2013-2014
Madeline Macdonald	UCSB	Role of TRPA1 in sensing temperature change	2013-2014
Letitia Muehler	UCSB	Characterization of rhodopsins required in gustation.	2014-2015
Hannah Hackbart	UCSB	Identification of neuropeptides that function in <i>Drosophila</i> sleep.	2013-present
Arianne Caudal	UCSB	Function of the <i>Drosophila</i> AstA Neuropeptide in regulating sleep homeostasis.	2013-2015
Huqiao Luo	UCSB	Dissecting the mechanism underlying temperature rate sensation in <i>Drosophila</i> larva.	2014-2014
Morris Aguilar	UCSB	Function of neuromodulator NPF in regulating fly social behavior.	2014-2015
Sierra Nicol	UCSB	Screen of <i>Drosophila</i> rhodopsin-interacting proteins by RNAi.	2014-2015
Tim Aikin	UCSB	Characterization of fly proprioception.	2014-present
Vince Kuppamala	UCSB	Function of an eye enriched circular RNA in the <i>Drosophila</i> photoreceptor cells.	2014-present
Paul Kovacs	UCSB	The function of the <i>Drosophila</i> taste receptors, GR89a and GR77a.	2014-present
Emma Zhang	UCSB	Characterization of rhodopsins required in gustation.	2015-present
Taylor	UCSB	Examining roles of novel rhodopsin-interacting	2015-present

Anthony		protein in <i>Drosophila</i> .	
Arian Mostofi	UCSB	Defining thermal nociception circuits in fly larva.	2015-present
Cody O'Reilly	UCSB	Examining roles of novel rhodopsin-interacting protein in <i>Drosophila</i> .	2015-present
Nate Murray	UCSB	Identification of the taste receptor for sensing high salt.	2015-present
Scott Susi	UCSB	The function of the <i>Drosophila</i> taste receptors, GR89a and GR77a.	2015-present
Steffin Huynh	UCSB	The role of TRPg in <i>Drosophila</i> courtship.	2015-present
Dominic Carusillo	UCSB	The molecular and cellular basis of nociception in <i>Drosophila</i> .	2015-present
Christopher Tien	UCSB	The molecular and cellular basis of nociception in <i>Drosophila</i> .	2015-present
Ahmed Elshiekh	UCSB	Identification of the taste receptor for sensing high salt.	2015-present
Alain Garkanian	UCSB	Identification of the taste receptor for sensing high salt.	2015-present
Jesus Trujillo	UCSB	Function of <i>Drosophila</i> neuropeptides in food satiety and metabolism.	2015-present
Persi Zamani-Raman	UCSB	Defining thermal nociception circuits in fly larva.	2015-present
Keenan Chung	UCSB	Defining thermal nociception circuits in fly larva.	2015-present
Sancy Childers	UCSB	Exploring the pain center in the brain of adult flies.	2015-present
John Mack	UCSB	Exploring the pain center in the brain of adult flies.	2015-present
Tyler Ogunmowo	UCSB	Function of neuromodulator NPF in regulating fly social behavior.	2015-present
Sharif Ahmed	UCSB	Function of neuropeptide AstA in regulating fly feeding behavior and metabolism.	2015-present
Ann de Santo	UCSB	The role of the Methuselah-like family of GPCRs in thermosensation.	2015-present