

CONTACT
INFORMATION

Department of Integrative Biology and Physiology
University of California, Los Angeles
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APPOINTMENTS

HHMI Postdoctoral Associate, UCLA, October 2010 – present
Department of Integrative Biology and Physiology
Laboratory of Dr. Mark Frye

EDUCATION

Ph.D., Brandeis University, 2010
Program in Molecular and Cell Biology
Laboratory of Dr. Piali Sengupta
Dissertation title: The molecular and physiological basis of thermosensory behaviors in *C. elegans*
Thesis Committee: Dr. Piali Sengupta, Dr. Michael Rosbash, Dr. Paul Garrity, and Dr. Aravi Samuel

M.A., Pepperdine University, 2004
Program in Education

B.A., Wellesley College, 2002
Majors in Neuroscience and Theater Studies

PUBLICATIONS

Chuntao Dan*, [Sara Wasserman](#)*, Jade Nguyen, Florian Engert, Vivek Jayaraman, Mark Frye, Sam Kunes.
Active odor-off detection in the early olfactory circuit modulates flight saccade and olfactory navigation in adult *Drosophila*. (* equal contribution). ***In preparation.***

[Sara M Wasserman](#) and Mark A Frye (2015) Group Behavior: Social Context Modulates Behavioral Responses to Sensory Stimuli. ***Current Biology Dispatch***. 25(11):R467-R469

[Wasserman SM](#)*, Aptekar JW*, Lu PM, Nguyen J**, Wang AL**, Keles MF, Grygoruk A, Krantz DE, Larsen C, Frye MA (2015) Olfactory neuromodulation of motion vision circuitry in *Drosophila*. ***Current Biology***. 25(4):467-472. (*equal author contribution, ** Undergraduate).

[Sara Wasserman](#), Alexandra Salomon*, and Mark A. Frye (2013). *Drosophila* tracks Carbon Dioxide in Flight. ***Current Biology***. 23(4):301-306. (* high school student)

[Sara Wasserman](#), Patrick Lu*, Jacob Aptekar, and Mark Frye (2012). Flies dynamically track, rather than ballistically escape, aversive odor during flight. ***J. Exp. Biol.*** 215, 2833-2840. (* undergraduate)

[Sara Wasserman](#), Matthew Beverly, Harry Bell, and Piali Sengupta (2011). Regulation of Response Properties and Operating Range of the AFD Thermosensory Neurons by cGMP Signaling. ***Current Biology***. 21(5):353-362.

Alexander M. van der Linden, Matthew Beverly, Sebastian Kadener, Joseph Rodriguez, [Sara Wasserman](#), Michael Rosbash and Piali Sengupta (2010). Genome-Wide Analysis of Light- and Temperature-Entrained Circadian Transcripts in *Caenorhabditis elegans*. ***PLoS Biol.*** 8(10): e1000503.

David Biron*, [Sara Wasserman](#)*, James H. Thomas, Aravinthan D.T. Samuel, and Piali Sengupta. (2008) An olfactory neuron responds stochastically to temperature and modulates *Caenorhabditis elegans* thermotactic behavior. ***PNAS***. 105(31):11002-11007. (* Authors contributed equally to this work)

David Biron, Mayumi Shibuya, Christopher Gabel, [Sara M Wasserman](#), Damon A Clark, Adam Brown, Piali Sengupta, and Aravinthan D T Samuel. (2006) A diacylglycerol kinase modulates long-term thermotactic behavioral plasticity in *C. elegans*. ***Nat. Neurosci.*** 9(12):1499-505.

AWARDS

2016, The International Society for Neuroethology Young Investigator Awardee
2015, The Journal of Experimental Biology Travelling Fellowship
2013, UCLA Department of Neurobiology Sawyer Travel Award
2012, Society for Neuroscience Postdoctoral Scholar Travel Award Finalist
2012, UCLA Society for Neuroscience Postdoctoral Scholar Travel Award Nominee
2007-2010, Individual Predoctoral Ruth L. Kirschstein National Research Service Award (NINDS);
Title: The molecular and physiological basis of thermosensory behavior in *C. elegans*
2004-2007, NIH Institutional Training Grant for Genetics, Brandeis University
2001, National Science Foundation (REU) Grant Recipient for summer research, Wellesley College

PUBLISHED ABSTRACTS

Sara Wasserman, Nadya Zolotova, Austin Wang*, Patrick Lu, and Mark Frye. Internal physiological state Modulates visual and olfactory behaviors in *Drosophila*. Gordon Research Conference – Neuroethology: Behavior, Evolution & Neurobiology, Luca, Italy. 2015. (* Undergraduate).

Sara Wasserman, Jacob W. Aptekar, Patrick Lu, Austin L. Wang, Jade Nguyen, David E. Krantz, Camilla Larsen, and Mark Frye, A novel class of visual motion detecting neurons in *Drosophila* integrates olfactory information. International Congress of Neuroethology, Sapporo, Japan, 2014.

Sara Wasserman, Alexandra Salomon, Patrick Lu, and Mark Frye, In-flight olfactory feature detection. Cell Press Symposia: Genes, Circuits, and Behavior, Toronto, Canada, 2013.

Sara Wasserman, Daniel Malkin, and Mark Frye. *Drosophila* avoid CO₂ while walking and seek it out in flight. Society for Neuroscience, New Orleans, LA, USA, 2012.

Sara Wasserman, Alexandra Salomon*, Daniel Malkin, and Mark Frye. *Drosophila* track CO₂ in flight. Tenth International Congress of Neuroethology, College Park, MD, USA 2012. (* High school student)

Sara Wasserman, Patrick Lu*, and Mark Frye. *Drosophila* anti-track an aversive odorant in flight. Gordon Research Conference - Neuroethology: Behavior, Evolution & Neurobiology, Easton, MA, USA, 2011. (* Undergraduate)

Sara Wasserman, David Biron, Matthew Beverly, ADT Samuel, and Piali Sengupta. Communication among neurons in a thermosensory circuit in *C. elegans*. Society for Neuroscience Annual Meeting, Washington, DC, USA 2008.

Sara Wasserman and David Biron, A.D.T Samuel, Piali Sengupta. A Novel GPCR in the AFD and AWC Neurons Contributes to Isothermal Tracking Behavior in *C. elegans*. 16th International *C. elegans* Meeting, Los Angeles, CA, USA, 2007.

Sara Wasserman, D. Biron, M. Shibuya, D.A. Clark, C. Gabel, A.D.T. Samuel, P. Sengupta. Modulation of Thermotactic Behavioral Plasticity in *C. elegans*. *C. elegans* Neurobiology Topic Meeting, Madison, WI, USA, 2006.

INVITED PRESENTATIONS

2015 Harvey Mudd College, Department of Biology Colloquium
2013 Syracuse University, Department of Biology (SU Advance)
2012 Claremont Colleges, Intercollegiate Neuroscience Program speaker series
2011 Wellesley College, Department of Neuroscience
2006 Wellesley College, REU summer speaker series
2009 UCLA, Department of Physiological Sciences
2009 UC Berkeley, Department of Molecular and Cell Biology

TEACHING EXPERIENCE

Guest lecturer, UCLA, Comparative Animal Physiology, 2011
Invited lecture for NEURO 300 Seminar, Wellesley College, 2011 and 2009
Invited lecture on invertebrate thermotaxis behavior for UCLA, PhySci 270, 2010
Graduate teaching assistant for Introductory Cell Biology, 2005 (Instructor: Neil Simister)
Graduate teaching assistant for Introductory Biology laboratory, 2006 (Instructor: Judith Tsipis)
Elementary teacher - Developed and taught science curriculum for grades 1 to 3 and assistant taught grades 5 and 6 science and history. The John Thomas Dye School, Los Angeles, CA 2002-2004.

STUDENTS MENTORED

Elliott Layne, Los Angeles-area high school student
Mitchell Genesse, UCSC undergraduate
Austin Wang, Jade Nguyen, Patrick Lu, UCLA undergraduates
Shivan Bonanno and Daniel Malkin, UCLA graduate rotation students

Allie Salomon, Los Angeles-area high school senior (currently an undergraduate at Northwestern University)
Lilly Belman, Brandeis undergraduate (currently a pediatric resident at UCSF)

PRESS

Covered in Outside JEB: Sara Wasserman, Alexandra Salomon*, and Mark A. Frye (2013). *Drosophila* tracks Carbon Dioxide in Flight. *Current Biology*. 23(4):301-306. (* High school student)

Covered in Inside JEB: Sara Wasserman, Patrick Lu*, Jacob Aptekar, and Mark Frye (2012). Flies dynamically track, rather than ballistically escape, aversive odor during flight. *J. Exp. Biol.* 215, 2833-2840 (*Undergraduate)

MANUSCRIPT
REFEREE

PLoS ONE, Scientific Reports

SOCIETY
MEMBERSHIPS

Society for Neuroscience, International Society for Neuroethology, Genetics Society of America, Phi Delta Kappa, Pepperdine University Chapter, Sigma Xi, Wellesley College Chapter

SCIENCE
OUTREACH

2015	UCLA Brain Awareness Week Lab Tours
2014	Summer Enrichment Pilot Program (SEEP) at Campbell Hall School
2014	Intel International Science and Engineering Fair Judge
2012-2013	STAR Education, neuroscience curriculum development and presentation for elementary school teachers
2012	Academy for Enriched Sciences, led professional development for elementary school teachers on neuroscience behind memory and study skills
2012	Calabasas High School, Calabasas, CA, seminar to AP Calculus BC Class
2012	UCLA, Judge for Science Poster Day Dean's Prize