

CURRICULUM VITAE

Kai Zinn

Howard and Gwen Laurie Smits Professor of Biology and Biological Engineering
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Education:

B.A. in Chemistry with specialization in Biochemistry, *summa cum laude*, from Revelle College, University of California, San Diego (1977).

Ph.D. in Biochemistry and Molecular Biology, from Harvard University (1984). Thesis advisor: Tom Maniatis

Research and Professional Experience:

Postdoctoral Fellow, Harvard University, 1984-1985, with Tom Maniatis

Postdoctoral Fellow, Stanford University and University of California, Berkeley, 1985-1989, with Corey S. Goodman

Assistant Professor, California Institute of Technology, 1989-1995.

Associate Professor, California Institute of Technology, 1995-1999

Professor, California Institute of Technology, 1999-present

Honors and Awards:

National Science Foundation Predoctoral Fellowship 1978-1981

Helen Hay Whitney Foundation Postdoctoral Fellowship 1985-1988

Alfred P. Sloan Research Fellowship in Neuroscience, 1990-1992

McKnight Scholars Award, 1990-1993

Pew Scholars Award, 1990-1994

March of Dimes Foundation Basil O'Connor Starter Scholars Award, 1990-1992

McKnight Investigator Award, 1994-1997

McKnight Brain Disorders Award, 2005-2007

Publications:

Menon, K.P., Kulkarni, V., Takemura, S-Y., Anaya, M., and Zinn, K. (2019) Interactions between Dpr11 and DIP- γ control selection of amacrine neurons in *Drosophila* color vision circuits. *eLife* 8:e48935. DOI: <https://doi.org/10.7554/eLife.48935>.

Bali, N., and Zinn, K (2019). Visualization of binding patterns for five Leucine-rich repeat proteins in the *Drosophila* embryo. *microPublication Biology*.

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Tsarouhas, V., Liu, D., Tsikala, G., Fedoseienko, A., Zinn, K., Matsuda, R., Billadeau, D.D., and Samakovlis, C. (2019). WASH phosphorylation balances endosomal versus cortical actin network integrities during epithelial morphogenesis. *Nature Communications* 10, DOI: 10.1038/s41467-019-10229-6.

Cheng, C., Park, Y., Kurleto, J.D., Jeon, M., Zinn, K., Thornton, J.W., and Özkan, E. (2019) A new family of neural wiring receptors across bilaterians defined by phylogenetic, biochemical and structural evidence. *Proc. Natl. Acad. Sci.*, 116 (20) 9837-9842. DOI: 10.1073/pnas.1818631116

Ashley, J. Sorrentino, V., Nagarkar-Jaiswal, S., Tan, L., Xu, S., Xiao, Q., Zinn, K., and Carrillo, R.A. (2019) Transsynaptic interactions between IgSF proteins DIP- α and Dpr10 are required for motor neuron targeting specificity in *Drosophila*. *eLife* 8:e42690, DOI: 10.7554/eLife.42690

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Zinn, K., and Özkan, E. (2017) Neural immunoglobulin superfamily interaction networks. *Current Opinion in Neurobiology* 45, 99-105 (Review).

Al-Anzi, B., Gerges, S., Olsman, N., Ormerod, C., Piliouras, G., Ormerod, J., and Zinn, K. (2017) Modeling and analysis of modular structure in diverse biological networks. *Journal of Theoretical Biology* 422, 18-30.

Zinn, K. (2016) Building a ladder to Hershey Heaven. *eLife*, pii: e15591. doi: 10.7554/eLife.15591. (Review)

Bali, N., Lee, H-K., and Zinn, K. (2016) Live staining of *Drosophila* embryos to detect and characterize expression of cell-surface RPTP ligands. In *Methods in Molecular Biology*, vol. 1447, Rafael Pulido (Eds.): Protein Tyrosine Phosphatases, 978-1-4939-3744-8, Springer.

Carrillo, R.A., Özkan, E., Menon, K.P., Nagarkar-Jaiswal, S., Lee, P-T., Jeon, M., Birnbaum, M.E., Bellen, H.J., Garcia, K.C., and Zinn, K. (2015) Control of synaptic

connectivity by a network of *Drosophila* IgSF cell surface proteins. *Cell* 163, 1770-1782. DOI: 10.1016/j.cell.2015.11.022

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Menon, K.P., Carrillo, R.A., and Zinn, K. (2015) The translational regulator Cup controls NMJ presynaptic terminal morphology. *Molecular and Cellular Neuroscience* 67, 126-136.

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Jeon, M., and Zinn, K. (2015) R3 receptor tyrosine phosphatases: conserved regulators of receptor tyrosine kinase signaling and tubular organ development. *Seminars in Cell and Developmental Biology* 37, 119-126 (Review).

Bower, D.V., Jesudason, E. C., Lee, H-K., Lansford, R., Zinn, K., and Fraser, S.E. (2014) Airway branching has conserved needs for local innervation but not neurotransmission. *BMC Biology* 12, article #92.

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Lee, H-K., Cording, A., Vielmetter, J., and Zinn, K. (2013) Interactions between a receptor tyrosine phosphatase and a cell surface ligand regulate axon guidance and glial-neuronal communication. *Neuron* 78, 813-826.

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Menon, K.P., Carrillo, R.A., and Zinn, K. (2013) Development and plasticity of the *Drosophila* larval neuromuscular junction. *WIREs Developmental Biology* 2. 647-670, doi: 10.1002/wdev.108 (Review).

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