

## David Tadres

Postdoctoral Scholar, Neurobiology

### Bio

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#### HONORS AND AWARDS

- Polak Young Investigator Award, Association for Chemoreception Sciences (04/19/2024)

#### STANFORD ADVISORS

- Thomas Clandinin, Postdoctoral Faculty Sponsor

### Publications

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#### PUBLICATIONS

- **An essential experimental control for functional connectivity mapping with optogenetics** *GENETICS*  
Tadres, D., Shiozaki, H. M., Tastekin, I., Stern, D. L., Louis, M.  
2025
- **Odorant Receptors Mediating Avoidance of Toxic Mustard Oils in *Drosophila melanogaster* Are Expanded in Herbivorous Relatives** *MOLECULAR BIOLOGY AND EVOLUTION*  
Matsunaga, T., Reisenman, C. E., Goldman-Huertas, B., Rajshekar, S., Suzuki, H. C., Tadres, D., Wong, J., Louis, M., Ramirez, S. R., Whiteman, N. K.  
2025; 42 (9)
- **Sensation of electric fields in the *Drosophila melanogaster* larva** *CURRENT BIOLOGY*  
Tadres, D., Riedl, J., Eden, A., Bontempo, A. E., Lin, J., Reid, S. F., Roehrich, B., Williams, K., Sepunaru, L., Louis, M.  
2025; 35 (8): 1848-1860.e4
- **Using the Raspberry Pi Virtual Reality (PiVR) System to Study *Drosophila* Larval Chemotaxis with Real and Virtual Odor Gradients.** *Cold Spring Harbor protocols*  
Tadres, D., Saxena, N., Louis, M.  
2024; 2024 (7)
- **Tracking the Navigation Behavior of *Drosophila* Larvae in Real and Virtual Odor Gradients by Using the Raspberry Pi Virtual Reality (PiVR) System.** *Cold Spring Harbor protocols*  
Tadres, D., Saxena, N., Louis, M.  
2024; 2024 (7)
- **Depolarization block in olfactory sensory neurons expands the dimensionality of odor encoding** *SCIENCE ADVANCES*  
Tadres, D., Wong, P. H., To, T., Moehlis, J., Louis, M.  
2022; 8 (50): eade7209
- **PiVR: An affordable and versatile closed-loop platform to study unrestrained sensorimotor behavior.** *PLoS biology*  
Tadres, D., Louis, M.  
2020; 18 (7): e3000712