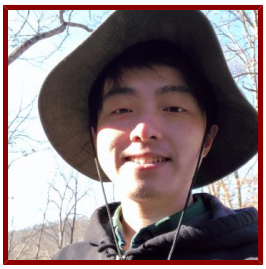
Stanford



Hongfei Ji

Postdoctoral Scholar, Molecular and Cellular Physiology

Bio

HONORS AND AWARDS

- Interdisciplinary Postdoctoral Scholar, Wu Tsai Neurosciences Institute (2025-2027)
- Bay Area Worm Meeting (BAWM) Best Poster Award, California State University, East Bay (2024)
- Mistletoe Research Fellowship (MRF) Finalist, Momental Foundation (2023)
- Penn Bioengineering Grad Symposium Best Poster, University of Pennsylvania (2021)
- Bioengineering Graduate Fellowship, University of Pennsylvania (2016-2018)

PROFESSIONAL EDUCATION

- Ph. D., University of Pennsylvania , Bioengineering (2022)
- B. S., Nanjing University , Physics and Acoustics (2016)

STANFORD ADVISORS

- Miriam Goodman, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Functional analysis of conserved C. elegans bHLH family members uncovers lifespan control by a peptidergic hub neuron.** *PLoS biology*
  Aguilar, G. R., Vidal, B., Ji, H., Evenblij, J., Liao, C. P., Ji, H., Valperga, G., Fang-Yen, C., Hobert, O.
  2025; 23 (1): e3002979
- **Automated multimodal imaging of Caenorhabditis elegans behavior in multi-well plates.** *Genetics*
  Ji, H., Chen, D., Fang-Yen, C.
  2024; 228 (4)
- **Segmentation-free measurement of locomotor frequency in Caenorhabditis elegans using image invariants.** *G3 (Bethesda, Md.)*
  Ji, H., Chen, D., Fang-Yen, C.
  2024
- **Functional analysis of conserved C. elegans bHLH family members uncovers lifespan control by a peptidergic hub neuron.** *bioRxiv : the preprint server for biology*
  Aguilar, G. R., Vidal, B., Ji, H., Evenblij, J., Ji, H., Valperga, G., Liao, C. P., Fang-Yen, C., Hobert, O.
  2024
- **Segmentation-free measurement of locomotor frequency in Caenorhabditis elegans using image invariants.** *bioRxiv : the preprint server for biology*
  Ji, H., Chen, D., Fang-Yen, C.

2024

- **A robotic system for automated genetic manipulation and analysis of Caenorhabditis elegans.** *PNAS nexus*
  Li, Z., Fouad, A. D., Bowlin, P. D., Fan, Y., He, S., Chang, M. C., Du, A., Teng, C., Kassouni, A., Ji, H., Raizen, D. M., Fang-Yen, C.
  2023; 2 (7): pgad197

- **A proprioceptive feedback circuit drives Caenorhabditis elegans locomotor adaptation through dopamine signaling.** *Proceedings of the National Academy of Sciences of the United States of America*
  Ji, H., Fouad, A. D., Li, Z., Ruba, A., Fang-Yen, C.
  2023; 120 (20): e2219341120

- **A proprioceptive feedback circuit drives Caenorhabditis elegans locomotor adaptation through dopamine signaling.** *bioRxiv : the preprint server for biology*
  Ji, H., Fouad, A. D., Li, Z., Ruba, A., Fang-Yen, C.
  2022

- **Phase response analyses support a relaxation oscillator model of locomotor rhythm generation in Caenorhabditis elegans.** *eLife*
  Ji, H., Fouad, A. D., Teng, S., Liu, A., Alvarez-Illera, P., Yao, B., Li, Z., Fang-Yen, C.
  2021; 10

- **Distributed rhythm generators underlie Caenorhabditis elegans forward locomotion.** *eLife*
  Fouad, A. D., Teng, S., Mark, J. R., Liu, A., Alvarez-Illera, P., Ji, H., Du, A., Bhirgoo, P. D., Cornblath, E., Guan, S. A., Fang-Yen, C.
  2018; 7

- **Pan-neuronal imaging in roaming Caenorhabditis elegans.** *Proceedings of the National Academy of Sciences of the United States of America*
  Venkatachalam, V., Ji, N., Wang, X., Clark, C., Mitchell, J. K., Klein, M., Tabone, C. J., Florman, J., Ji, H., Greenwood, J., Chisholm, A. D., Srinivasan, J., Alkema, et al
  2016; 113 (8): E1082-8

- **Effects of acoustic vibration on the reorientations of C. elegans** *Chinese Science Bulletin*
  Zhang, Y., Ji, H., Luo, L., Guo, X., Tu, J., Zhang, D.
  2016

- **Low intensity pulse ultrasound stimulate chondrocytes growth in a 3-D alginate scaffold through improved porosity and permeability.** *Ultrasonics*
  Guo, G., Lu, L., Ji, H., Ma, Y., Dong, R., Tu, J., Guo, X., Qiu, Y., Wu, J., Zhang, D.
  2015; 58: 43-52

- **Ultrasonic enhancement of the porosity of alginate scaffold** *ACTA PHYSICA SINICA*
  Lu Lu, Ji Hong-Fei, Guo Ge-Pu, Guo Xia-Sheng, Tu Juan, Qiu Yuan-Yuan, Zhang Dong
  2015; 64 (2)