Stanford

# Chunyang Dong

Postdoctoral Scholar, Psychiatry

## Bio

### BIO

Chunyang Dong completed his Ph.D. studies from University of California, Davis with Dr. Lin Tian, where he specialized in protein engineering to develop genetically encoded biosensors to enable real-time imaging of neuromodulator dynamics. As part of his postdoctoral pursuits with Dr. Sergiu Pasca at Stanford University, he hopes to combine disciplines between biosensors and modeling human neurological disease using brain region-specific organoids. Despite this shift, his unwavering goal is to deepen the understanding of brain development, disease processes, and translate research to potential treatments for neurological disorders.

### HONORS AND AWARDS

- Allen G. Marr Dissertation Award, University of California Davis (2023)
- Toni Shippenberg Young Investigator Award, KappaCon (2023)

### PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of California Davis (2023)
- Bachelor of Science, University of California Davis (2017)

### STANFORD ADVISORS

- Sergiu Pasca, Postdoctoral Faculty Sponsor

### LINKS

- Google Scholar: https://scholar.google.com/citations?user=hA0MsIwAAAAJ&hl=en&oi=ao
- Pasca Lab Website: https://www.pascalab.org

## Publications

### PUBLICATIONS

- **Prefrontal cortical dynorphin peptidergic transmission constrains threat-driven behavioral and network states.** *Neuron*
  Wang, H., Flores, R. J., Yarur, H. E., Limoges, A., Bravo-Rivera, H., Casello, S. M., Loomba, N., Enriquez-Traba, J., Arenivar, M., Wang, Q., Ganley, R., Ramakrishnan, C., Fenno, et al
  2024

- **Opioidergic signaling contributes to food-mediated suppression of AgRP neurons.** *Cell reports*
  Sayar-Atasoy, N., Yavuz, Y., Laule, C., Dong, C., Kim, H., Rysted, J., Flippo, K., Davis, D., Aklan, I., Yilmaz, B., Tian, L., Atasoy, D.
  2024; 43 (1): 113630

- **Psychedelics promote neuroplasticity through the activation of intracellular 5-HT2A receptors** *SCIENCE*
  Vargas, M. V., Dunlap, L. E., Dong, C., Carter, S. J., Tombari, R. J., Jami, S. A., Cameron, L. P., Patel, S. D., Hennessey, J. J., Saeger, H. N., McCorvy, J. D., Gray, J. A., Tian, et al

2023; 379 (6633): 700-706

- **Fluorescence Imaging of Neural Activity, Neurochemical Dynamics, and Drug-Specific Receptor Conformation with Genetically Encoded Sensors** *ANNUAL REVIEW OF NEUROSCIENCE*
  Dong, C., Zheng, Y., Long-Iyer, K., Wright, E. C., Li, Y., Tian, L.
  2022; 45: 273-294
- **Psychedelic-inspired drug discovery using an engineered biosensor** *CELL*
  Dong, C., Ly, C., Dunlap, L. E., Vargas, M. V., Sun, J., Hwang, I., Azinfar, A., Oh, W., Wetsel, W. C., Olson, D. E., Tian, L.
  2021; 184 (10): 2779-+
- **Directed Evolution of a Selective and Sensitive Serotonin Sensor via Machine Learning** *CELL*
  Unger, E. K., Keller, J. P., Altermatt, M., Liang, R., Matsui, A., Dong, C., Hon, O. J., Yao, Z., Sun, J., Banala, S., Flanigan, M. E., Jaffe, D. A., Hartanto, et al
  2020; 183 (7): 1986-+
- **An expanded palette of dopamine sensors for multiplex imaging in vivo** *NATURE METHODS*
  Patriarchi, T., Mohebi, A., Sun, J., Marley, A., Liang, R., Dong, C., Puhger, K., Mizuno, G., Davis, C. M., Wiltgen, B., von Zastrow, M., Berke, J. D., Tian, et al
  2020; 17 (11): 1147-+