Stanford



Rebecca Shi

Lecturer, Biology

Bio

ACADEMIC APPOINTMENTS

- Lecturer, Biology

Publications

PUBLICATIONS

- **Stochastic growth and ligand-receptor interaction-mediated stabilization generate stereotyped dendritic arbors.** *Nature neuroscience*
  Shi, R., Ho, X. Y., Tao, L., Bayless-Edwards, L., Taylor, C. A., Zhao, T., Zou, W., Lizzappi, M., Eichel, K., Mao, T., Shen, K.
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- **The intrinsically disordered cytoplasmic tail of a dendrite branching receptor uses two distinct mechanisms to regulate the actin cytoskeleton.** *eLife*
  Kramer, D. A., Narvaez-Ortiz, H. Y., Patel, U., Shi, R., Shen, K., Nolen, B. J., Roche, J., Chen, B.
  2023; 12
- **Dendrites use mechanosensitive channels to proofread ligand-mediated neurite extension during morphogenesis.** *Developmental cell*
  Tao, L., Coakley, S., Shi, R., Shen, K.
  2022
- **A two-step actin polymerization mechanism drives dendrite branching.** *Neural development*
  Shi, R., Kramer, D. A., Chen, B., Shen, K.
  2021; 16 (1): 3
- **The Golgi Outpost Protein TPPP Nucleates Microtubules and Is Critical for Myelination.** *Cell*
  Fu, M. M., McAlear, T. S., Nguyen, H. n., Oses-Prieto, J. A., Valenzuela, A. n., Shi, R. D., Perrino, J. J., Huang, T. T., Burlingame, A. L., Bechstedt, S. n., Barres, B. A.
  2019
- **SAP102 regulates synaptic AMPAR function through a CNIH-2-dependent mechanism** *JOURNAL OF NEUROPHYSIOLOGY*
  Liu, M., Shi, R., Hwang, H., Han, K., Wong, M., Ren, X., Lewis, L. D., Brown, E. N., Xu, W.
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- **A Dendritic Guidance Receptor Complex Brings Together Distinct Actin Regulators to Drive Efficient F-Actin Assembly and Branching** *DEVELOPMENTAL CELL*
  Zou, W., Dong, X., Broederdorf, T. R., Shen, A., Kramer, D. A., Shi, R., Liang, X., Miller, D. M., Xiang, Y. K., Yasuda, R., Chen, B., Shen, K.
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- **Shank Proteins Differentially Regulate Synaptic Transmission (vol 4, e0163-15.2017, 2017)** *ENEURO*
  Shi, R., Redman, P., Ghose, D., Hwang, H., Liu, Y., Ren, X., Ding, L. J., Liu, M., Jones, K. J., Xu, W.
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- **Dissecting the Role of P/Q-Type Calcium Channels in Corticothalamic Circuit Dysfunction and Absence Epilepsy.** *The Journal of neuroscience : the official journal of the Society for Neuroscience*
  Shi, R. n., Schroeder, G. M., Nimarko, A. F.
  2016; 36 (21): 5677–79

- **Differential requirement for NMDAR activity in SAP97 beta-mediated regulation of the number and strength of glutamatergic AMPAR-containing synapses** *JOURNAL OF NEUROPHYSIOLOGY*
  Liu, M., Lewis, L. D., Shi, R., Brown, E. N., Xu, W.
  2014; 111 (3): 648-658