

# Featured Publications

(2017.01-2017.12)

1. Li, K., Jiang, Q., Bai, X., Yang, Y., Ruan, M., and **Cai, S.\*** (2017) Tetrameric assembly of K<sup>+</sup> channels requires ER-located chaperone proteins. *Mol. Cell* 65: 52-65.
2. Zhang S., Duan L., He S., Zhuang G., and **Yu X.\*** (2017) Phosphatidylinositol 3,4-bisphosphate regulates neurite initiation and dendrite morphogenesis via actin aggregation. *Cell Res.* 27: 253-273.
3. Yang, L., Dong, F., Yang, Q., Yang, P., Wu, R., Wu, Q., Wu, D., Li, C., Zhong, Y., Lu, Y., Cheng, X., Xu, F., Chen, L., Bao, L., and **Zhang, X.\*** (2017) FGF13 selectively regulates heat nociception by interacting with Nav1.7. *Neuron* 93: 806-821.
4. Zhang, B., Yao, Y., Zhang, H., Kawakami, K. and **Du, J.\*** (2017) Left habenula mediates light-preference behavior in zebrafish via an asymmetrical visual pathway. *Neuron* 93: 914-928.
5. Li, H., Liu, X., **Andolina, I.\***, Li, X., Lu, Y., Spillmann, L., and **Wang, W.\*** (2017) Asymmetries of dark and bright negative afterimages are paralleled by subcortical ON and OFF poststimulus responses. *J. Neurosci.* 37: 1984-1996.
6. Chang, L., Zhang, S., **Poo, M.\***, and **Gong, N.\*** (2017) Spontaneous expression of mirror self-recognition in monkeys after learning precise visual-proprioceptive association for mirror images. *Proc. Natl. Acad. Sci. USA.* 144: 3258-3263.
7. Zhou, L., Liu, M., Li, Q., Deng, J., Mu, D., and **Sun, Y.\*** (2017) Organization of functional long-range circuits controlling the activity of serotonergic neurons in the dorsal raphe nucleus. *Cell Rep.* 18: 3018-3032.
8. Li, Y., Xu, J., Liu, Y., Zhu, J., Liu, N., Zeng, W., Huang, N., Rasch, M., Jiang, H., Gu, X., Li, X., Luo, M., Li, C., Teng, J., Chen, J., Zeng, S., Lin, L., and Zhang, X.\* (2017) A distinct entorhinal cortex to hippocampal CA1 direct circuit for olfactory associative learning. *Nat. Neurosci.* 20: 559-570.
9. Yang, Z., Li, P., Chen, R., Wang, J., Wang, S., Shen, Y., Wu, X., Fang, B., **Cheng, X.\***, and **Xiong, Z.\*** (2017) ADAM10-Initiated release of notch intracellular domain regulates microtubule stability and radial migration of cortical neurons. *Cereb. Cortex* 27: 919-932.
10. Fan, Z., Zhao, M., Joshi, P., Li, P., Zhang, Y., Guo, W., Xu, Y., Wang, H., Zhao, Z., and **Yan, J.\*** (2017) A class of circadian long non-coding RNAs mark enhancers modulating long-range circadian gene regulation. *Nucleic Acids Res.* 45: 5720-5738.
11. Yao, X., Wang, X., Hu, X., Liu, Z., Liu, J., Zhou, H., Shen, X., Wei, Y., Huang, Z., Ying,

- W., Wang, Y., Nie, Y., Zhang, C., Li, S., Cheng, L., Wang, Q., Wu, Y., Huang, P., **Sun, Q.\***, **Shi, L.\***, and **Yang, H.\*** (2017) Homology-mediated end joining-based targeted integration using CRISPR/Cas9. *Cell Res.* 27: 801-814.
12. Wang, L., Li, M., Qu, C., Miao, W., Yin, Q., Liao, J., Cao, H., Huang, M., Wang, K., Zuo, E., Peng, G., Zhang, S., Chen, G., Li, Q., Tang, K., Yu, Q., Li, Z., Wong, C., Xu, G., Jing, N., **Yu, X.\***, and Li, J.\* (2017) CRISPR-Cas9-mediated genome editing in one blastomere of two-cell embryos reveals a novel Tet3 function in regulating neocortical development. *Cell Res.* 27: 815-829.
  13. Li, M., Miao, W., Wu, Q., He, S., Yan, G., Yang, Y., Liu, J., Taketo, M., and **Yu, X.\*** (2017) A critical role of presynaptic Cadherin/Catenin/p140cap complexes in stabilizing spines and functional synapses in the neocortex. *Neuron* 94: 1155-1172.
  14. Xu, B., Zhang, Y., Du, X., Li, J., Zi, H., Bu, J., Yan, Y., Han, H., and **Du, J.\*** (2017) Neurons secrete miR-132-containing exosomes to regulate brain vascular integrity. *Cell Res.* 27: 882-897.
  15. Zuo, E., Cai, Y., Li, K., Wei, Y., Wang, B., Sun, Y., Liu, Z., Liu, J., Hu, X., Wei, W., Huo, X., Shi, L., Tang, C., Liang, D., Wang, Y., Nie, Y., Zhang, C., Yao, X., Wang, X., Zhou, C., Ying, W., Wang, Q., Chen, R., Shen, Q., Xu, G., Li, J., **Sun, Q.\***, **Xiong, Z.\*** and **Yang, H.\*** (2017) One-step generation of complete gene knockout mice and monkeys by CRISPR/Cas9-mediated gene editing with multiple sgRNAs. *Cell Res.* 27: 933-945.
  16. Tang, X., Gao, J., Jia, X., Zhao, W., Zhang, Y., Pan, W., and **He, J.\*** (2017) Bipotent progenitors as embryonic origin of retinal stem cells. *J. Cell. Biol.* 216: 1833-1847.
  17. Zhou, T., Zhu, H., Fan, Z., Wang, F., Chen, Y., Liang, H., Yang, Z., Zhang, L., Lin, L., Zhan, Y., Wang, Z., and Hu, H.\* (2017) History of winning remodels thalamo-PFC circuit to reinforce social dominance. *Science* 357: 162-168.
  18. Mu, D., Deng, J., Liu, K., Wu, Z., Shi, Y., Guo, W., Mao, Q., Liu, X., Li, H., and **Sun, Y.\*** (2017) A central neural circuit for itch sensation. *Science* 357: 695-699.
  19. Yang, K., Yu, B., Cheng, C., Cheng, T., Yuan, B., Li, K., Xiao, J., **Qiu, Z.\***, and Zhou, Y.\* (2017) Mir505-3p regulates axonal development via inhibiting the autophagy pathway by targeting Atg12. *Autophagy* 13: 1679-1696.
  20. Yin, J., Gao, G., Liu, X., Hao, Z., Li, K., Kang, X., Li, H., Shan, Y., Hu, W., Li, H., and **Cai, S.\*** (2017) Genetic variation in glia–neuron signalling modulates ageing rate. *Nature* 551: 198-203.
  21. Cong, L., Wang, Z., Chai, Y., Hang, W., Shang, C., Yang, W., Bai, L., Du, J., **Wang, K.\***, and Wen, Q.\* (2017) Rapid whole brain imaging of neural activity in freely behaving larval zebrafish (*Danio rerio*). *Elife* 6: e28158.

22. Zuo, E., Huo, X., Yao, X., Hu, X., Sun, Y., Yin, J., He, B., Wang, X., Shi, L., Ping, J., Wei, Y., Ying, W., Wei, W., Liu, W., Tang, C., Li, Y., Hu, J.\* and **Yang, H.\*** (2017) CRISPR/Cas9-mediated targeted chromosome elimination. *Genome Biol.* 18: 224.
23. Yang, L., and **Gu, Y.\*** (2017) Distinct spatial coordinate of visual and vestibular heading signals in macaque FEFsem and MSTd. *eLife* 6: e29809.
24. **Qiu, Z.\*** (2017) Deciphering MECP2-associated disorders: disrupted circuits and the hope for repair. *Curr. Opin. Neurobiol.* 48: 30-36. (Review)

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