

2021

Nature Cell Biology

Gao N, Hu J, He B, Ji Z, Hu X, Huang J, Wei Y, Peng J, Wei Y, Zhou Y, Shen X, Li H, Feng X, Xiao Q, Shi L, Sun Y, Zhou C, Zhou H, Yang H. Endogenous promoter-driven sgRNA for monitoring the expression of low-abundance transcripts and lncRNAs. *Nat Cell Biol.* 2021 Jan;23(1):99-108. doi: 10.1038/s41556-020-00610-9. Epub 2021 Jan 4. PMID: 33398178.

致谢：基因编辑平台、分子细胞技术平台、光学成像平台

Development

Wang G, Li C, He S, Liu Z. Mosaic CRISPR-stop enables rapid phenotyping of nonsense mutations in essential genes. *Development.* 2021 Mar 9;148(5):dev196899. doi: 10.1242/dev.196899. PMID: 33558388.

致谢：光学成像平台

Nature-Methods

Xu C, Zhou Y, Xiao Q, He B, Geng G, Wang Z, Cao B, Dong X, Bai W, Wang Y, Wang X, Zhou D, Yuan T, Huo X, Lai J, Yang H. Programmable RNA editing with compact CRISPR-Cas13 systems from uncultivated microbes. *Nat Methods.* 2021 May;18(5):499-506. doi: 10.1038/s41592-021-01124-4. Epub 2021 May 3. PMID: 33941935.

署名：基因编辑平台

Nature Communications

Duan CA, Pan Y, Ma G, Zhou T, Zhang S, Xu NL. A cortico-collicular pathway for motor planning in a memory-dependent perceptual decision task. *Nat Commun.* 2021 May 11;12(1):2727. doi: 10.1038/s41467-021-22547-9. PMID: 33976124; PMCID: PMC8113349.

致谢：光学成像平台

Cell Reports

Yang QQ, Zhai YQ, Wang HF, Cai YC, Ma XY, Yin YQ, Li YD, Zhou GM, Zhang X, Hu G, Zhou JW. Nuclear isoform of FGF13 regulates post-natal neurogenesis in the hippocampus through an epigenomic mechanism. *Cell Rep.* 2021 May 18;35(7):109127. doi: 10.1016/j.celrep.2021.109127. PMID: 34010636.

致谢：分子细胞技术平台、光学成像平台

Neuron

Wang H, Lv S, Stroebel D, Zhang J, Pan Y, Huang X, Zhang X, Paoletti P, Zhu S. Gating mechanism and a modulatory niche of human GluN1-GluN2A NMDA receptors. *Neuron.* 2021 Aug 4;109(15):2443-2456.e5. doi: 10.1016/j.neuron.2021.05.031. Epub 2021 Jun 28. PMID: 34186027.

致谢：光学成像平台

Elife

Sun S, Li S, Luo Z, Ren M, He S, Wang G, Liu Z. Dual expression of Atoh1 and Ikzf2 promotes transformation of adult cochlear supporting cells into outer hair cells. *Elife.* 2021 Sep 3;10:e66547. doi: 10.7554/eLife.66547. PMID: 34477109; PMCID: PMC8439656.

致谢：电镜技术平台、分子细胞技术平台、光学成像平台

◆ 2020

PNAS

T. Zhou, Y.Z. Lu, C.S. Xua, R. Wang, L.Y. Zhang, P.F. Lu. Occludin protects secretory cells from ER stress by facilitating SNARE-dependent apical protein exocytosis. PNAS, 2020, www.pnas.org/cgi/doi/10.1073/pnas.1909731117.

致谢：电镜技术平台

J Extracell Vesicles

Jiang W, Ma P, Deng L, Liu Z, Wang X, Liu X, Long G. Hepatitis A virus structural protein pX interacts with ALIX and promotes the secretion of virions and foreign proteins through exosome-like vesicles. J Extracell Vesicles. 2020 Jan 22;9(1):1716513.

署名及致谢：电镜技术平台

电子显微学报

王旭, 孔好, 杨侃, 王玲玲, 张宾. 不同固定方式对贴壁细胞形态和超微结构的影响. 电子显微学报, 2020, 39(1), 79-85.

署名/通讯：电镜技术平台

Cell Res

Qu, R., Dong, L., Zhang, J., Yu, X.*, Wang, L.* & Zhu, S.*(2020) Cryo-EM structure of human heptameric Pannexin 1 channel. Cell Res. In press.

致谢：电镜技术平台

elife

Li, C., Li, X., Bi, Z., Sugino, K., Wang, G., Zhu, T., Liu, Z.* (2020) Comprehensive transcriptome analysis of cochlear spiral ganglion neurons at multiple ages. eLife 9:e50491

致谢：光学成像平台

Cell

Zhou H, Su J, Hu X, Zhou C, Li H, Chen Z, Xiao Q, Wang B, Wu W, Sun Y, Zhou Y, Tang C, Liu F, Wang L, Feng C, Liu M, Li S, Zhang Y, Xu H, Yao H, Shi L, Yang H. Glia-to-Neuron Conversion by CRISPR-CasRx Alleviates Symptoms of Neurological Disease in Mice. Cell. 2020 Apr 30;181(3):590-603.e16. doi: 10.1016/j.cell.2020.03.024. Epub 2020 Apr 8. PMID: 32272060.

致谢：基因编辑平台、分子细胞技术平台、光学成像平台

Nature

Wang, Mei & Du, Lei & Lee, Aih & Li, Yan & Qin, Huiwen & He, Jie. (2020). Different lineage contexts direct common pro-neural factors to specify distinct retinal cell subtypes. The Journal of cell biology. 219. 10.1083/jcb.202003026.

致谢：分子细胞技术平台、光学成像平台

Journal of Cell Biology

Wang M, Du L, Lee AC, Li Y, Qin H, He J. Different lineage contexts direct common pro-neural factors to specify distinct retinal cell subtypes. J Cell Biol. 2020 Sep 7;219(9):e202003026. doi: 10.1083/jcb.202003026. PMID: 32699896; PMCID: PMC7480095.

致谢：分子细胞技术平台

Nature Neuroscience

Gui P, Jiang Y, Zang D, Qi Z, Tan J, Tanigawa H, Jiang J, Wen Y, Xu L, Zhao J, Mao Y, Poo MM, Ding N, Dehaene S, Wu X, Wang L. Assessing the depth of language processing in patients with disorders of consciousness. Nat Neurosci. 2020 Jun;23(6):761-770. doi: 10.1038/s41593-020-0639-1. Epub 2020 May 25. PMID: 32451482.

致谢：灵长类生理检测平台

Neuron

Liu TT, Du XF, Zhang BB, Zi HX, Yan Y, Yin JA, Hou H, Gu SY, Chen Q, Du JL. Piezo1-Mediated Ca²⁺ Activities Regulate Brain Vascular Pathfinding during Development.

Neuron. 2020 Oct 14;108(1):180-192.e5. doi: 10.1016/j.neuron.2020.07.025. Epub 2020 Aug 21. PMID: 32827455.

致谢: 光学成像平台

2019

Genome Biol

Zhang, M., Zhou, C., Wei, Y., Xu, C., Pan, H., Ying, W., Sun, Y., Sun, Y., Xiao, Q., Yao, N., Zhong, W., Li, Y., Wu, K., Yuan, G., Mitalipov, S.* , Chen, Z.* and Yang, H.*(2019) Human cleaving embryos enable robust homozygotic nucleotide substitutions by base editors. *Genome Biol.* 20:101

致谢: 光学成像平台

PNAS

Wang, J., Lou, S., Wang, T., Wu, R., Li, G., Zhao, M., Lu, B., Li, Y., Zhang, J., Cheng, X., Shen, Y., Wang, X., Zhu, Z., Li, M., Takumi, T., Yang, H., Yu, X., Liao, L.* and Xiong, Z.* (2019) UBE3A-mediated PTPA ubiquitination and degradation regulate PP2A activity and dendritic spine morphology. *PNAS* In press.

致谢: 光学成像平台

Nat. Neurosci

Zhong, L., Zhang, Y., Duan, C., Deng, J., Pan, J. & Xu, N.* (2019) Causal contributions of parietal cortex to perceptual decision-making during stimulus categorization. *Nat. Neurosci.* In press.

致谢: 基因编辑平台

Science

Zuo, E., Sun, Y., Wu, W., Yuan, T., Ying, W., Sun, H., Yuan, L., Steinmetz, L.* , Li, Y.* , Yang, H.*(2019) Cytosine base editor generates substantial off-target single nucleotide variants in mouse embryos. *Science* In press.

致谢: 分子细胞技术平台

Nat. Commun

Cheng, T.* , Li, S., Yuan, B., Wang, X., Zhou W., & Qiu, Z.* (2019) Expanding C–T base editing toolkit with diversified cytidine deaminases. *Nat. Commun.* 10:3612

致谢: 分子细胞技术平台

Neuron

Hou, H., Zheng, Q., Zhao, Y., Pouget, A., Gu, Y.* (2019) Neural correlates of optimal multisensory decision making under time-varying reliabilities with an invariant linear probabilistic population code. *Neuron* In press.

致谢: 生物信息学平台

Brain

Xu, W., Bao, P., Jiang, X., Wang, H., Qin, M., Wang, R., Wang, T., Yang, Y., Lorenzini, I., Liao, L., Sattler, R., Xu, J.* (2019) Reactivation of nonsense-mediated mRNA decay protects against C9orf72 dipeptide-repeat neurotoxicity. *Brain* In press.

致谢: 生物信息学平台

Nature

Zhou, C., Sun, Y., Yan, R., Liu, Y., Zuo, E., Gu, C., Han, L., Wei, Y., Hu, X., Zeng, R., Li, Y.* , Zhou, H.* , Guo, F.* , Yang, H.* (2019) Off-target RNA mutation induced by DNA base editing and its elimination by mutagenesis. *Nature* In press.

致谢: 分子细胞技术平台

eLife

Yu S , He J . Stochastic cell-cycle entry and cell-state-dependent fate outputs of injury-reactivated tectal radial glia in zebrafish[J]. *eLife* ences, 2019, 8.

致谢: 分子细胞技术平台

Neuroimage

Han Z, Chen W, Chen X, et al. Awake and behaving mouse fMRI during Go/No-Go task.

Neuroimage. 2019;188:733-742. doi:10.1016/j.neuroimage.2019.01.002

署名：脑影像中心

JMCB

Single-cell Transcriptomes Reveal Molecular Specializations of Neuronal Cell Types in the Developing Cerebellum. Peng J, Sheng AL1, Xiao Q, Shen L, Ju XC, Zhang M, He ST, Wu C, Luo ZG. *J Mol Cell Biol.* 2019 Aug 19;11(8):636-648. doi: 10.1093/jmcb/mjy089.

署名：生物信息学平台、分子细胞技术平台

Epigenetics & Chromatin

Shibin Hu, Pin Lv, Zixiang Yan and Bo Wen. Disruption of nuclear speckles reduces chromatin interactions in active compartments. *Epigenetics & Chromatin* (2019) 12:43

致谢：电镜技术平台

J Cell Mol Med

Sheng X, Zhou Y, Wang H Shen Y, Liao Q, Rao Z Deng F, Xie L, Yao C, Mao H, Liu Z, Peng M, Long Y, Zeng Y Xue L, Gao N, Kong Y, Zhou X. Establishment and characterization of a radiation-induced dermatitis rat model. *J Cell Mol Med.* 2019 May;23(5):3178-3189

署名及致谢：电镜技术平台

National Science Review

Li,J.; Lin, X.; Tang, C., Lu, Y.; Hu, X.; Zuo, E.; Li, H., Ying, W.; Sun, Y.; Lai, L.; Chen, H.; Guo, X.; Zhang, Q.; Wu, S.; Zhou, C.; Shen, X.; Wang, Q.; Lin, M.; Ma, L.; Wang, N.; Krainer A.R.; Shi, L.;(*) , Yang H.(*) (2019) Disruption of splicing-regulatory elements using CRISPR/Cas9 rescues spinal muscular atrophy in human iPSCs and mice *National Science Review* nwz: 131

署名：基因编辑平台

Cell Discovery

Hu, Xinde(#); Wang, Jinghan (#); Yao, Xuan(#); Xiao, Qingquan (#), Xue, Yuanyuan; Wang, Shaoran; Shi, Linyu; Shu, Yilai(*); Li, Huawei (*); Yang H.(*) (2019) Screened AAV variants permit efficient transduction access to supporting cells and hair cells *Cell Discovery* 5: 49

署名：基因编辑平台

2018

Nat. Neuro

Zhou, H., Liu, J., Zhou, C., Gao, N., Rao, Z., Li, H., Hu, X., Li, C., Yao, X., Shen, X., Sun, Y., Wei, Y., Liu, F., Ying, W., Zhang, J., Tang, C., Zhang, X., Xu, H., Shi, L., Cheng, L., Huang, P. *, Yang, H.* (2018) In vivo simultaneous transcriptional activation of multiple genes in the brain using CRISPR/dCas9-activator transgenic mice *Nat. Neurosci.* 21: 440-446

署名：基因编辑平台

Journal of Visualized Experiments

Yao, X., Wang, X., Liu, J., Shi, L., Huang, P.*, and Yang, H.* (2018) CRISPR/Cas9-mediated targeted integration in vivo using a homology-mediated end joining-based strategy *Jove-J Vis. Exp.* 133: e56844

署名：基因编辑平台

Cell Research

Yao, X., Liu, Z., Wang, X., Wang, Y., Nie, Y. H., Lai, L., Sun, R., Shi, L., Sun, Q.*, Yang, H.* (2018) Generation of Knock-in Cynomolgus Monkey via CRISPR/Cas9 Editing *Cell Res.* 28: 379-382

署名：基因编辑平台

Developmental Cell

Yao, X.*, Zhang, M., Wang, X., Ying, W., Hu, X., Dai, P., Meng, F., Shi, L., Sun, Y., Yao, N., Zhong, W., Li, Y., Wu, K., Li, W.*, Chen, Z.*, Yang, H.* (2018) Tild-CRISPR allows for efficient and precise gene knockin in mouse and human cells *Dev. Cell* 45: 526-536

署名: 基因编辑平台

J Histochem Cytochem

Wu Q, Zhang Y, Dai C, Kong Y, Pan L. The Degeneration of the Vestibular Efferent Neurons After Intratympanic Gentamicin Administration. *J Histochem Cytochem.* 2018 Nov;66(11):801-812

署名及致谢: 电镜技术平台

eCollection

Shen L. The evolution of shame and guilt. *PLoS One.* 2018 Jul 11;13(7):e0199448. doi: 10.1371/journal.pone.0199448. eCollection 2018.

署名/通讯: 生物信息学平台

Nature Neuroscience

Zhou, H., Liu, J., Zhou, C., Gao, N., Rao, Z., Li, H., Hu, X., Li, C., Yao, X., Shen, X., Sun, Y., Wei, Y., Liu, F., Ying, W., Zhang, J., Tang, C., Zhang, X., Xu, H., Shi, L., Cheng, L., Huang, P. #, Yang, H.# (2017). In vivo simultaneous transcriptional activation of multiple genes in the brain using CRISPR/dCas9-activator transgenic mice. *Nature Neuroscience* In press

署名: 基因编辑平台

Neuroscience Bulletin

Chen XY1, Zhang CC1, Li YX1, Lv Q, Zeljic K, Huang P, Jin HY, Chen SD, Sun BM*, Wang Z.*, Functional connectivity-based modelling simulates subject-specific network effects of focal brain stimulation, *Neuroscience Bulletin*, 2018, <https://doi.org/10.1007/s12264-018-0256-0>

署名: 脑影像中心

Neuron

Duan, L.H.#, Zhang, X.D.#, Miao, W.Y., Sun, Y.J., Xiong, G.L., Wu, Q.Z., Li, G.Y., Yang, P., Yu, H., Li, H.M., Wang, Y., Zhang, M., Hu, L.Y., Tong, X.P., Zhou, W.H., Yu, X.* (2018) PDGFR β cells rapidly relay inflammatory signal from the circulatory system to neurons via chemokine CCL2. *Neuron* In press.

致谢: 光学成像平台、分子细胞技术平台

Neuron

Yao X-P, Cheng X-W, Wang C, Zhao M, Guo X-X, Su H-Z, Lai L-L, Zou X-H, Chen X-J, Zhao Y-Y, Dong E-L, Lu Y-Q, Wu S, Li X-J, Fan G-F, Yu H-J, Xu J-F, Wang N, Xiong Z-Q, Chen W-J (2018) Biallelic mutations in MYORG cause autosomal recessive primary familial brain calcification. *Neuron* In press.

致谢: 光学成像平台

Journal of Vision

Yao, X., Wang, X., Liu, J., Shi, L., Huang, P.#, and Yang, H.# (2018) CRISPR/Cas9-mediated targeted integration in vivo using a homology-mediated end joining-based strategy. *J. Vis. Exp.* 133: e56844.

署名: 基因编辑平台

Hearing Research

Li C, Shu Y, Wang G, Zhang H, Lu Y, Li X, Li G, Song L, Liu Z. (2018) Characterizing a novel vGlut3-P2A-iCreER knockin mouse strain in cochlea. *Hearing Research.* 364: 12-24.

致谢: 光学成像平台

Development

Zhang H, Pan H, Zhou C, Wei Y, Ying W, Li S, Wang G, Li C, Ren Y, Li G, Ding X, Sun Y, Li GL, Song L, Li Y, Yang H, Liu Z. (2018) Simultaneous zygotic inactivation of multiple genes in mouse through CRISPR/Cas9-mediated base editing. *Development*. 2018 Oct 1. doi: 10.1242/dev.168906. [Epub ahead of print]

致谢: 光学成像平台

Cell Research

Yao, X., Liu, Z., Wang, X., Wang, Y., Nie, Y. H., Lai, L., Sun, R., Shi, L., Sun, Q.#, Yang, H.# (2017). Generation of Knock-in Cynomolgus Monkey via CRISPR/Cas9 Editing. *Cell Research* In press

署名: 基因编辑平台

Cell Res

Tan G-H, Liu Y-Y, Wang L, Li K, Zhang Z-Q, Li H-F, Yang Z-F, Li Y, Li D, Wu M-Y, Yu C-L, Long J-J, Chen R-C, Li L-X, Yin L-P, Liu J-W, Cheng X-W, Shen Q, Shu Y-S, Sakimura K, Liao L-J, Wu Z-Y, Xiong Z-Q. (2017) PRRT2 deficiency induces paroxysmal kinesigenic dyskinesia by regulating synaptic transmission in cerebellum. *Cell Res*. 28:90-110.

致谢: 电镜技术平台、光学成像平台

Biological Psychiatry

Yin DZ1, Zhang CC1, Lv QM, Chen XY, Zeljic K, Gong HF, Jin HY, Wang Z.*, Sun BM*, Dissociable frontostriatal pathways: mechanism and predictor of the clinical efficacy of capsulotomy in obsessive-compulsive disorder, *Biological Psychiatry*, DOI: <https://doi.org/10.1016/j.biopsych.2018.04.006>, in press.

署名/通讯及致谢: 脑影像中心

Cerebral Cortex

Wang ZW, Zeljic K, Jiang QY, Gu Y, Wang W, Wang Z*, Dynamic network communication in the human functional connectome predicts perceptual variability in visual illusion, *Cerebral Cortex*, 2018, 28(1): 48-62.

署名/通讯及致谢: 脑影像中心

Cell

Yao, X.#, Zhang, M., Wang, X., Ying, W., Hu, X., Dai, P., Meng, F., Shi, L., Sun, Y., Yao, N., Zhong, W., Li, Y., Wu, K., Li, W.#, Chen, Z.#, Yang, H.# (2018) Tild-CRISPR allows for efficient and precise gene knockin in mouse and human cells. *Dev. Cell* 45:526-536

署名: 基因编辑平台

◆ 2017

Ebio. Medicine

Yao, X., Wang, X., Liu, J., Hu, X., Shi, L., Shen, X., Ying, W., Sun, X., Wang, X., Huang, P.*, Yang, H.* (2017) CRISPR/Cas9 - Mediated Precise Targeted Integration In Vivo Using a Double Cut Donor with Short Homology Arms *Ebio. Medicine* 20: 19-26

署名: 基因编辑平台

Cell Research

Yao, X., Wang, X., Hu, X., Liu, Z., Liu, J., Zhou, H., Shen, X., Wei, Y., Huang, Z., Ying, W., Wang, Y., Nie, Y. H., Zhang, C. C., Li, S., Cheng, L., Wang, Q., Wu, Y., Huang, P., Sun, Q.*, Shi, L.*, Yang, H.* (2017) Homology-mediated end joining-based targeted integration using CRISPR/Cas9 *Cell Res*. 27: 801-814

署名/通讯: 基因编辑平台

Cell Research

Zuo, E., Cai, Y.J., Li, K., Wei, Y., Wang, B.A., Sun, Y., Liu, Z., Liu, J., Hu, X., Wei, W., Huo, X., Shi, L., Tang, C., Liang, D., Wang, Y., Nie, Y. H., Zhang, C. C., Yao, X., Wang, X., Zhou,

C., Ying, W., Wang, Q., Chen, R. C., Shen, Q., Xu, G. L., Li, J. Sun, Q.* , Xiong, Z.* , 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

署名: 基因编辑平台

Genome Biol

Zuo, E.W., Huo, X.N., Yao, X., Hu, X.D., Sun, Y.D., Yin, J.H., He, B.B., Wang, X., Shi, L.Y., Ping, J., Wei, Y., Ying, W.Q., Wei, W., Liu, W.J., Tang, C., Li, Y.X., Hu, J.Z.* and Yang, H.* (2017) CRISPR/Cas9-mediated targeted chromosome elimination Genome Biol. 18: 224

署名: 基因编辑平台