



Zhiquan Liu

Postdoctoral Scholar, Ophthalmology

Bio

STANFORD ADVISORS

- Yang Sun, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Efficient Rescue of Retinal Degeneration in Pde6a Mice by Engineered Base Editing and Prime Editing.** *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*
Liu, Z., Chen, S., Davis, A. E., Lo, C. H., Wang, Q., Li, T., Ning, K., Zhang, Q., Zhao, J., Wang, S., Sun, Y.
2024: e2405628
- **Effect of Brimonidine on Retinal Ganglion Cell Function by in vivo Calcium Imaging of Optic Nerve Crush in Mice.** *Experimental eye research*
Li, T., Kowal, T. J., Zhao, J., Li, L., Wang, Q., Ning, K., Lo, C. H., Liu, Z., Shen, Y., Yu, J., Jin, H., Sun, Y.
2025: 110355
- **dCasMINI-mediated therapy rescues photoreceptors degeneration in a mouse model of retinitis pigmentosa.** *Science advances*
Wang, Q., Xu, X., Chen, S., Lu, R., Li, L., Lo, C. H., Liu, Z., Ning, K., Li, T., Kowal, T. J., Wang, B., Hartnett, M. E., Wang, et al
2024; 10 (51): eadn7540
- **All-in-one AAV-mediated Nrl gene inactivation rescues retinal degeneration in Pde6a mice.** *JCI insight*
Liu, Z., Chen, S., Lo, C. H., Wang, Q., Sun, Y.
2024
- **Defective Neurogenesis in Lowe Syndrome is Caused by Mitochondria Loss and Cilia-related Sonic Hedgehog Defects.** *bioRxiv : the preprint server for biology*
Lo, C. H., Chen, S., Zhao, J., Liu, Z., Wang, B., Wang, Q., Kowal, T. J., Sun, Y.
2024
- **Primary cilia formation requires the Leigh syndrome-associated mitochondrial protein NDUFAF2.** *The Journal of clinical investigation*
Lo, C. H., Liu, Z., Chen, S., Lin, F., Berneshawi, A. R., Yu, C. Q., Koo, E. B., Kowal, T. J., Ning, K., Hu, Y., Wang, W. J., Liao, Y. J., Sun, et al
2024; 134 (13)
- **Employing plasmid-based CRISPR-hyperdCas12, CasRx, and prime editing systems for in vivo gene manipulation in the mouse retina**
Li, L., Hamed, L., Liu, Z., Deng, B., Sun, Y., Wang, S.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **Efficient prevention of retinal degeneration in *Pde6a* mice by all-in-one AAV-mediated *Nrl* gene editing**
Liu, Z., Chen, S., Lo, C., Wang, Q., Sun, Y.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024

- **Gene Therapy for Glaucoma using CRISPR/Cas13d in mice**

Chen, S., Liu, Z., Lo, C., Sun, Y.

ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024

- **Base editing correction of OCRL in Lowe syndrome: ABE-mediated functional rescue in patient-derived fibroblasts.** *Human molecular genetics*

Chen, S., Lo, C. H., Liu, Z., Wang, Q., Ning, K., Li, T., Sun, Y.

2024