

# Stanford

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## Liang Li

Instructor, Ophthalmology

### Bio

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#### ACADEMIC APPOINTMENTS

- Instructor, Ophthalmology

#### PROFESSIONAL EDUCATION

- PhD, Huazhong Agricultural University , Preventive Veterinary (2017)
- Master, Shantou University , Biochemistry and molecular biology (2011)
- Bachelor, Yanshan University , Bioengineering (2008)

### Publications

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#### PUBLICATIONS

- **RGC-specific ATF4 and/or CHOP deletion rescues glaucomatous neurodegeneration and visual function.** *Molecular therapy. Nucleic acids*  
Fang, F., Liu, P., Huang, H., Feng, X., Li, L., Sun, Y., Kaufman, R. J., Hu, Y.  
2023; 33: 286-295
- **Osteopontin drives retinal ganglion cell resiliency in glaucomatous optic neuropathy.** *Cell reports*  
Zhao, M., Toma, K., Kinde, B., Li, L., Patel, A. K., Wu, K. Y., Lum, M. R., Tan, C., Hooper, J. E., Kriegstein, A. R., La Torre, A., Liao, Y. J., Welsbie, et al  
2023; 42 (9): 113038
- **Differential effects of SARM1 inhibition in traumatic glaucoma and EAE optic neuropathies.** *Molecular therapy. Nucleic acids*  
Liu, P., Chen, W., Jiang, H., Huang, H., Liu, L., Fang, F., Li, L., Feng, X., Liu, D., Dalal, R., Sun, Y., Jafar-Nejad, P., Ling, et al  
2023; 32: 13-27
- **Spp1 drives retinal neuron resiliency in glaucomatous neuropathy but not axotomy**  
Zhao, M., Toma, K., Kinde, B., Li, L., Patel, A., Liao, Y., Vila, A., Kriegstein, A., Welsbie, D., Hu, Y., Han, Y., Duan, X.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2023
- **Neuroprotection of RGC-specific ATF4 Deletion in Mouse Glaucoma Model**  
Li, L., Fang, F., Liu, P., Huang, H., Feng, X., Hu, Y.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2023
- **Silicone Oil-Induced Glaucomatous Neurodegeneration in Rhesus Macaques.** *International journal of molecular sciences*  
Moshiri, A., Fang, F., Zhuang, P., Huang, H., Feng, X., Li, L., Dalal, R., Hu, Y.  
2022; 23 (24)
- **Longitudinal in vivo Ca<sup>2+</sup> imaging reveals dynamic activity changes of diseased retinal ganglion cells at the single-cell level.** *Proceedings of the National Academy of Sciences of the United States of America*  
Li, L., Feng, X., Fang, F., Miller, D. A., Zhang, S., Zhuang, P., Huang, H., Liu, P., Liu, J., Sredar, N., Liu, L., Sun, Y., Duan, et al  
2022; 119 (48): e2206829119

- **Maprotiline restores ER homeostasis and rescues neurodegeneration via Histamine Receptor H1 inhibition in retinal ganglion cells.** *Nature communications*  
Chen, W., Liu, P., Liu, D., Huang, H., Feng, X., Fang, F., Li, L., Wu, J., Liu, L., Solow-Cordero, D. E., Hu, Y.  
2022; 13 (1): 6796
- **Single-cell transcriptome analysis of regenerating RGCs reveals potent glaucoma neural repair genes.** *Neuron*  
Li, L., Fang, F., Feng, X., Zhuang, P., Huang, H., Liu, P., Liu, L., Xu, A. Z., Qi, L. S., Cong, L., Hu, Y.  
2022
- **In Vivo Evaluation of Naive and Diseased RGC Activities at Single-Cell Level**  
Li, L., Fang, F., Feng, X., Zhang, S., Miller, D., Zhuang, P., Huang, H., Liu, P., Liu, J., Sredar, N., Liu, L., Sun, Y., Duan, et al  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2022
- **NMNAT2 and NAD(+) are Downregulated in Glaucomatous RGCs and Overexpression of NMNAT2 Rescues Glaucomatous Neurodegeneration**  
Liu, D., Fang, F., Zhuang, P., Feng, X., Liu, P., Huang, H., Li, L., Chen, W., Liu, L., Sun, Y., Jiang, H., Ye, J., Hu, et al  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2022
- **Neuroprotection of SARM1 Inhibition in Traumatic and Glaucomatous but not in EAE Optic Neuropathies**  
Liu, P., Huang, H., Chen, W., Fang, F., Li, L., Feng, X., Liu, L., Liu, D., Dalal, R., Sun, Y., Ling, K., Rigo, F., Hu, et al  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2022
- **NMNAT2 Is Downregulated in Glaucomatous RGCs and RGC-Specific Gene Therapy Rescues Neurodegeneration and Visual Function.** *Molecular therapy : the journal of the American Society of Gene Therapy*  
Fang, F., Zhuang, P., Feng, X., Liu, P., Liu, D., Huang, H., Li, L., Chen, W., Liu, L., Sun, Y., Jiang, H., Ye, J., Hu, et al  
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- **Osteopontin drives retinal ganglion cell resiliency in glaucomatous neuropathy**  
Kinde, B., Zhao, M., Toma, K., Li, L., Hu, Y., Han, Y., Duan, X.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2021
- **OCRL regulates lysosome positioning and mTORC1 activity through SSX2IP-mediated microtubule anchoring.** *EMBO reports*  
Wang, B., He, W., Prosseda, P. P., Li, L., Kowal, T. J., Alvarado, J. A., Wang, Q., Hu, Y., Sun, Y.  
2021: e52173
- **Chronic mild and acute severe glaucomatous neurodegeneration derived from silicone oil-induced ocular hypertension.** *Scientific reports*  
Fang, F., Zhang, J., Zhuang, P., Liu, P., Li, L., Huang, H., Webber, H. C., Xu, Y., Liu, L., Dalal, R., Sun, Y., Hu, Y.  
2021; 11 (1): 9052
- **Delineating the organization of projection neuron subsets in primary visual cortex with multiple fluorescent rabies virus tracing.** *Brain structure & function*  
Li, L., Tang, Y., Sun, L., Yu, J., Zhang, S., Gong, H., Webber, H. C., Zhang, X., Hu, Z., Li, X., Rahman, K., Shi, X., Fu, et al  
2021
- **Post-translational modification of Sox11 regulates RGC survival and axon regeneration.** *eNeuro*  
Chang, K., Bian, M., Xia, X., Madaan, A., Sun, C., Wang, Q., Li, L., Nahmou, M., Noro, T., Yokota, S., Galvao, J., Kreymerman, A., Tanasa, et al  
2021
- **Neuronal NMNAT2 Overexpression Does Not Achieve Significant Neuroprotection in Experimental Autoimmune Encephalomyelitis/Optic Neuritis.** *Frontiers in cellular neuroscience*  
Liu, P., Huang, H., Fang, F., Liu, L., Li, L., Feng, X., Chen, W., Dalal, R., Sun, Y., Hu, Y.  
2021; 15: 754651
- **Longitudinal Morphological and Functional Assessment of RGC Neurodegeneration After Optic Nerve Crush in Mouse.** *Frontiers in cellular neuroscience*  
Li, L. n., Huang, H. n., Fang, F. n., Liu, L. n., Sun, Y. n., Hu, Y. n.  
2020; 14: 109
- **Mouse gamma-Synuclein Promoter-Mediated Gene Expression and Editing in Mammalian Retinal Ganglion Cells.** *The Journal of neuroscience : the official journal of the Society for Neuroscience*  
Wang, Q. n., Zhuang, P. S., Huang, H. n., Li, L. n., Liu, L. n., Webber, H. C., Dalal, R. n., Siew, L. n., Fligor, C. M., Chang, K. C., Nahmou, M. n., Kreymerman, A. n., Sun, et al  
2020

- **In Vivo Two-photon Calcium Imaging in Dendrites of Rabies Virus-labeled V1 Corticothalamic Neurons** *NEUROSCIENCE BULLETIN*  
Tang, Y., Li, L., Sun, L., Yu, J., Hu, Z., Lian, K., Cao, G., Dai, J.  
2019
- **A Reversible Silicon Oil-Induced Ocular Hypertension Model in Mice.** *Journal of visualized experiments : JoVE*  
Zhang, J., Fang, F., Li, L., Huang, H., Webber, H. C., Sun, Y., Mahajan, V. B., Hu, Y.  
2019
- **A novel inducible and reversible mouse glaucoma model: Silicone Oil-Induced Ocular Hypertension Under-detected (SOHU)**  
Zhang, J., Li, L., Huang, H., Webber, H., Li, S., Tang, P., Mahajan, V. B., Sun, Y., Zhang, M., Hu, Y.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2019
- **Neuroprotection of Retinal Ganglion Cells by AAV2-gamma-Synuclein Promoter-Mediated CRISPR/Cas9 Gene Editing**  
Li, L., Wang, Q., Huang, H., Sun, Y., Goldberg, J. L., Hu, Y.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2019
- **Stem cell-derived retinal ganglion cell differentiation and its transplantation**  
Chang, K., Wu, S., Li, L., Sun, C., Xia, X., Knasel, C., Nahmou, M., Wernig, M., Goldberg, J. L.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2019
- **Loss of optineurin C-terminus causes significant retinal ganglion cell degeneration**  
Webber, H., Huang, H., Li, L., Zhang, J., Zhuang, P., Wang, Q., Hu, Y.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2019
- **Memantine can relieve the neuronal impairment caused by neurotropic virus infection** *JOURNAL OF MEDICAL VIROLOGY*  
Sun, L., Zhou, M., Liu, C., Tang, Y., Xiao, K., Dai, J., Gao, Z., Siew, L., Cao, G., Wu, X., Li, L., Zhang, R.  
2019; 91 (6): 935–40
- **Silicone oil-induced ocular hypertension and glaucomatous neurodegeneration in mouse** *ELIFE*  
Zhang, J., Li, L., Huang, H., Fang, F., Webber, H. C., Zhuang, P., Liu, L., Dalal, R., Tang, P. H., Mahajan, V. B., Sun, Y., Li, S., Zhang, et al  
2019; 8
- **The anatomy and metabolome of the lymphatic system in the brain in health and disease.** *Brain pathology (Zurich, Switzerland)*  
He, W. n., Jing, Y. n., Wan, Q. n., Xiao, K. n., Chen, K. n., Lu, Y. n., Li, L. n., Tang, Y. n., Deng, Y. n., Yao, Z. n., Yue, J. n., Cao, G. n.  
2019
- **Digestion-ligation-only Hi-C is an efficient and cost-effective method for chromosome conformation capture** *NATURE GENETICS*  
Lin, D., Hong, P., Zhang, S., Xu, W., Jamal, M., Yan, K., Lei, Y., Li, L., Ruan, Y., Fu, Z. F., Li, G., Cao, G.  
2018; 50 (5): 754-+
- **In vivo fiber photometry of neural activity in response to optogenetically manipulated inputs in freely moving mice** *JOURNAL OF INNOVATIVE OPTICAL HEALTH SCIENCES*  
Li, L., Tang, Y., Sun, L., Rahman, K., Huang, K., Xu, W., Yu, J., Dai, J., Cao, G.  
2017; 10 (5)
- **Rabies viruses leader RNA interacts with host Hsc70 and inhibits virus replication** *ONCOTARGET*  
Zhang, R., Liu, C., Cao, Y., Jamal, M., Chen, X., Zheng, J., Li, L., You, J., Zhu, Q., Liu, S., Dai, J., Cui, M., Fu, et al  
2017; 8 (27): 43822–37
- **Induction of HepG2 cell apoptosis by Irgarol 1051 through mitochondrial dysfunction and oxidative stresses** *TOXICOLOGY IN VITRO*  
Wang, L., Liang, B., Li, L., Liu, W.  
2013; 27 (6): 1771–79
- **Enhanced proliferation and differentiation of neural stem cells grown on PHA films coated with recombinant fusion proteins** *ACTA BIOMATERIALIA*  
Xie, H., Li, J., Li, L., Dong, Y., Chen, G., Chen, K. C.  
2013; 9 (8): 7845–54

## PRESENTATIONS

- In Vivo Evaluation of Naïve and Diseased RGC Activities at Single-Cell Level - ARVO (May 1, 2022 - May 13, 2022)

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- Neuroprotection of RGC-specific ATF4 Deletion in Mouse Glaucoma Model - ARVO (April 24, 2023 - April 24, 2023)