



Ke Ning

Postdoctoral Research Fellow, Ophthalmology

Bio

BIO

Dr. Ning currently joins Dr. Yang Sun's lab as a postdoctoral fellow at Dept. of Ophthalmology, Stanford University. Her current research interests include cilia-mediated signaling in RPE-related diseases and glaucoma. Dr. Ning received her MD at Xiamen University in China and completed her internship at Zhongshan Hospital Affiliated with Xiamen University. Her long-term research interest is to understand primary cilia roles in ocular development and how alterations in cilia-related gene expression contribute to eye diseases. Her further goal is to be a physician-scientist and to translate scientific discoveries to patient therapies. Some of her hobbies are cycling, reading, and skiing.

HONORS AND AWARDS

- Macular Degeneration Research Postdoctoral Fellowship Award, BrightFocus Foundation (2021-2023)
- The 2020 Alston Callahan, MD Postdoctoral Scholar, International Retinal Research Foundation (2020-2021)

PROFESSIONAL EDUCATION

- MD, Xiamen University (2019)

PATENTS

- Ke Ning etc.. "China P.Rep. Patent 201720157302.9 A device for generating murine sleep deprivation model", Xiamen University, Jan 2, 0189

Publications

PUBLICATIONS

- **Optogenetic stimulation of phosphoinositides reveals a critical role of primary cilia in eye pressure regulation** *SCIENCE ADVANCES*
Prosseda, P. P., Alvarado, J. A., Wang, B., Kowal, T. J., Ning, K., Stamer, W., Hu, Y., Sun, Y.
2020; 6 (18)
- **Defective INPP5E distribution in NPHP1-related Senior-Loken syndrome.** *Molecular genetics & genomic medicine*
Ning, K. n., Song, E. n., Sendayen, B. E., Prosseda, P. P., Chang, K. C., Ghaffarieh, A. n., Alvarado, J. A., Wang, B. n., Haider, K. M., Berbari, N. F., Hu, Y. n., Sun, Y. n.
2020: e1566
- **Developmental Distribution of Primary Cilia in the Retinofugal Visual Pathway.** *The Journal of comparative neurology*
Alvarado, J. A., Dhande, O. S., Prosseda, P. P., Kowal, T. J., Ning, K. n., Jabbehdari, S. n., Hu, Y. n., Sun, Y. n.
2020
- **Oculocerebrorenal Syndrome of Lowe: Characterizations of Ocular Presentation and Management**
Ma, X., Ning, K., Kowal, T., Sun, Y.
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- **The Role of Phosphoinositides in Aqueous Humor Dynamics via Optogenetic Stimulation in the Trabecular Meshwork**
Alvarado, J., Prosseda, P., Ning, K., Kowal, T., Wang, B., Hu, Y., Sun, Y.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2019
- **Role of inositol phosphatase OCRL in microtubule nucleation: Implications for Oculocerebrorenal Syndrome of Lowe**
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- **Characterization of primary cilia in mouse retina during retinal development**
Ning, K., Kowal, T., Chang, K., Alvarado, J., Silva, R., Kreymerman, A., Mahajan, V. B., Hu, Y., Sun, Y.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2019
- **Review of Ocular Manifestations of Joubert Syndrome** *GENES*
Wang, S. F., Kowal, T. J., Ning, K., Koo, E. B., Wu, A. Y., Mahajan, V. B., Sun, Y.
2018; 9 (12)
- **The role of inositol phosphatase OCRL in microtubule nucleation: Implications for Oculocerebrorenal Syndrome of Lowe**
Wang, B., Prosseda, P. P., He, W., Kowal, T., Alvarado, J. A., Ning, K., Sun, Y.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2018
- **Ocular and renal phenotypes of NPHP1 deletion in Senior Loken syndrome**
Ning, K., Song, E., Haider, K. M., Ghaffarieh, A., Alvarado, J. A., Sun, Y.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2018
- **Optogenetic Regulation of Aqueous Outflow in Mouse Trabecular Meshwork**
Alvarado, J. A., Prosseda, P. P., Luo, N., Wang, B., Ning, K., He, W., Kowal, T., Sun, Y.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2018
- **Sleep deprivation disrupts the lacrimal system and induces dry eye disease.** *Experimental & molecular medicine*
Li, S. n., Ning, K. n., Zhou, J. n., Guo, Y. n., Zhang, H. n., Zhu, Y. n., Zhang, L. n., Jia, C. n., Chen, Y. n., Sol Reinach, P. n., Liu, Z. n., Li, W. n.
2018; 50 (3): e451
- **Ectodysplasin A regulates epithelial barrier function through sonic hedgehog signalling pathway.** *Journal of cellular and molecular medicine*
Li, S. n., Zhou, J. n., Zhang, L. n., Li, J. n., Yu, J. n., Ning, K. n., Qu, Y. n., He, H. n., Chen, Y. n., Reinach, P. S., Liu, C. Y., Liu, Z. n., Li, et al
2018; 22 (1): 230–40
- **Ectodysplasin A protein promotes corneal epithelial cell proliferation.** *The Journal of biological chemistry*
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2017; 292 (32): 13391–401