Stanford

Rain Runxia Wen

Postdoctoral Scholar, Ophthalmology

Bio

BIO

Rain Runxia Wen obtained her B.Sc. (Hons) in biology in 2012, and Ph.D. degree in cell and developmental biology in 2018. She joined the Goldberg Lab in the Department of Ophthalmology at Stanford University in 2019. She is currently studying the molecular mechanisms underlying retinal ganglion cell axon growth and optic nerve regeneration.

HONORS AND AWARDS

- ARVO Travel Grant, The Association For Research in Vision and Ophthalmology (2021)
- Graduate Student Travel Award, University of British Columbia (2017)
- College for Interdisciplinary Studies Graduate Award, University of British Columbia (2012)
- Marguerite Adamson Award, Marguerite Adamson Estate (2012)

PROFESSIONAL EDUCATION

- Ph.D., University of British Columbia , Cell and Developmental Biology (2018)

STANFORD ADVISORS

- Jeffrey Goldberg, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Examination of retrotransposon expression in optic neuropathies**
  Wen, R., Tanasa, B., Xia, X., Nahmou, M., Heng, K., Singh, A., Goldberg, J. L.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2021
- **Intravitreal delivery of AAV2 transduces porcine retinal ganglion cells**
  Heng, K., Li, B., Singh, A., Wen, R., Wu, A. Y., Goldberg, J. L.
  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2021
- **Autophagy in Xenopus laevis rod photoreceptors is independently regulated by phototransduction and misfolded RHOP23H** *AUTOPHAGY*
  Wen, R. H., Stanar, P., Tam, B., Moritz, O. L.
  2019; 15 (11): 1970–89
- **Autophagy Induction by HDAC Inhibitors Is Unlikely to be the Mechanism of Efficacy in Prevention of Retinal Degeneration Caused by P23H Rhodopsin**
  Wen, R. H., Loewen, A. D., Vent-Schmidt, R. J., Moritz, O. L., Rickman, C. B., Grimm, C., Anderson, R. E., Ash, J. D., LaVail, M. M., Hollyfield, J. G.
  SPRINGER INTERNATIONAL PUBLISHING AG.2019: 401–5

- **Opposing Effects of Valproic Acid Treatment Mediated by Histone Deacetylase Inhibitor Activity in Four Transgenic X-laevis Models of Retinitis Pigmentosa** *JOURNAL OF NEUROSCIENCE*
  Vent-Schmidt, R. J., Wen, R. H., Zong, Z., Chiu, C. N., Tam, B. M., May, C. G., Moritz, O. L.
  2017; 37 (4): 1039–54

- **Light Induces Ultrastructural Changes in Rod Outer and Inner Segments, Including Autophagy, in a Transgenic Xenopus laevis P23H Rhodopsin Model of Retinitis Pigmentosa** *INVESTIGATIVE OPHTHALMOLOGY & VISUAL SCIENCE*
  Bogea, T. H., Wen, R. H., Moritz, O. L.
  2015; 56 (13): 7947–55

PRESENTATIONS

- Using a tandemly linked fluorescent LC3 marker to examine autophagy in transgenic X. laevis photoreceptors. - Association for Research in Vision and Ophthalmology (ARVO) (2015)
- HDAC inhibitors alter retinal degeneration phenotypes and induce autophagy in Xenopus laevis models of retinal degeneration. - Association for Research in Vision and Ophthalmology (ARVO) (2016)
- Characterization of autophagy in normal and degenerating rod photoreceptors of Xenopus laevis using dually fluorescent LC3 markers. - Association for Research in Vision and Ophthalmology (ARVO) (2017)
- Autophagy in rod photoreceptors is upregulated by light exposure and misfolded rhodopsin. - The 8th International Symposium on Autophagy (ISA) (2017)
- Using tandemly linked fluorescent protein markers to study autophagy in rod photoreceptors. - University of British Columbia/ The Imaging Symposium (2016)
- Autophagy in rod photoreceptors is upregulated by light exposure and misfolded rhodopsin. - Vancouver Autophagy Symposium. (2017)