

STAFF SCIENTIST POSITION

Henderson Ocular Stem Cell Laboratory at the Retina Foundation is seeking a highly motivated and creative staff scientist with expertise in stem cell and molecular biology. The successful candidate will play a key role in a fully funded project investigating molecular mechanism(s) and pathways involved in Retinal Pigment Epithelium (RPE) degeneration and death in Age-related Macular Degeneration (AMD). Our laboratory aims to develop therapeutic strategies for inhibiting RPE cell loss in AMD Using CRISPR/Cas9 generated stem-cell derived RPE and retinal organoids, high throughput/high content small molecule and genetic screens. Successful applicant will collaborate with highly recognized experts in AMD clinical care, stem cell biology, molecular biology, and retina development, Dr. Karl Csaky, MD, PhD (Molecular Ophthalmology Lab at Retina Foundation) and Donald J. Zack, MD, PhD (Wilmer Eye Institute at Johns Hopkins Medicine).

Established in 1975, the Retina Foundation is a world-renowned research institute comprised of five laboratories with the unwavering mission to prevent vision loss caused by AMD, pediatric eye conditions, and inherited eye diseases. Retina Foundation develops potential treatments for patients with various eye diseases through innovative research and clinical trials.

Dr. Sripathi is the Director of the Henderson Ocular Stem Cell Laboratory at the Retina Foundation of the Southwest. Before joining the Retina Foundation, he was a Research Associate (Faculty) and a post-doctoral research fellow in the department of ophthalmology (Wilmer Eye Institute) at the Johns Hopkins University School of Medicine. Dr. Sripathi received his Ph.D. in Retina Biochemistry from Michigan Technological University in 2013. Dr. Sripathi aims to better model human stem cell-derived retinal pigment epithelium (hRPE), the cells whose death in AMD, which potentially leads to visual loss and blindness in the elderly. He uses pharmacological and gene therapy approaches to slowing and preventing RPE cell loss during early AMD progression.

Related publications include:

- S. R. Sripathi 'IKK β inhibition attenuates epithelial mesenchymal transition of human stem cell derived retinal pigment epithelium' Cells (2023), 12(8),1155.
- J. Mertz, S. R. Sripathi et al, 'Proteomic and phosphoproteomic analysis identifies liver-related signaling in retinal pigment epithelial cells during epithelial-mesenchymal transition' *Cell Rep* (2021) Oct 19;37(3)
- S. R. Sripathi et al, 'Proteome Landscape of Epithelial-to-Mesenchymal Transition (EMT) of Retinal Pigment Epithelium Shares Commonalities with Malignancy-Associated EMT' *Mol Cell Proteomics* (2021) Aug 26;100131
- S. R. Sripathi et al, 'Transcriptome Landscape of Epithelial to Mesenchymal Transition of Human Stem Cell-Derived Retinal Pigment Epithelium' *Investig. Ophthalmol. Vis. Sci* (2021) Apr 1;62(4):1

Benefits at the Foundation Include: Medical, Dental, Vision, 401-K Plan, Life Insurance, Aflac, PTO, FSA.

<u>Qualifications:</u> Applicant must have a PhD in cell biology, molecular biology, neuroscience or a closely related biological sciences field with a strong first author publication record. Ideal qualities include interest in vision research, strong analytical and problem-solving skills, excellent communication and writing skills.

<u>Position opening date</u>: Anticipated start date is October 1, 2024 (negotiable). This position will remain open until filled.

<u>How to apply:</u> Interested applicant should submit their CV and one-page cover letter that include their previous accomplishments, research interests, and career goals, along with names and contact information of three references to Srinivasa Sripathi at ssripathi@retinafoundation.org.