

STAFF SCIENTIST POSITION

The newly established Age-related Macular Degeneration (AMD) Stem Cell Laboratory at the Retina Foundation of the Southwest is seeking a highly motivated, qualified and creative scientist with expertise in stem cell and molecular biology to join as a staff scientist. Our lab applies stem cell reprogramming, differentiation, genome editing, small molecule, genetic screening and proteogenomic approaches to understand RPE degeneration in AMD. The successful candidate will play a key role in a fully funded project investigating molecular mechanism(s), pathways involved in Retinal Pigment Epithelium (RPE) de-differentiation and death in early AMD progression. Using CRISPR/Cas9 generated stem-cell derived 2D RPE and 3D optic eye cups (organoids), high throughput/high content small molecule and genetic screens, our lab aims to develop therapeutic strategies for inhibiting RPE cell loss in AMD. Successful applicant will collaborate with Dr. Karl Csaky, MD, PhD (Molecular Ophthalmology Lab at Retina Foundation) and Donald J. Zack, MD, PhD (Wilmer Eye Institute at Johns Hopkins Medicine). Both individuals are highly recognized experts in AMD clinical care, stem cell biology, molecular biology, and retina development.

Established in 1975, the Retina Foundation (<https://retinafoundation.org>) is a world-renowned research institute comprised of six 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 AMD 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 Age-related Macular Degeneration (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:

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 Time, FSA.

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

Position opening date: Anticipated start date is April 1, 2023. This position will remain open until filled.

How to apply: 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