

Postdoctoral Position

A postdoctoral position is available in the [Retina Biochemistry & Clinical Disease Modeling Laboratory](#) in the newly renovated, state-of-the-art research space at the Stein Eye Institute, UCLA. The candidate will have a strong interest in translational research that involves integrating clinical findings of retinal degeneration with basic science research. Dr. Radu's Lab focuses on identifying and understanding the molecular mechanisms of retinal dystrophies by developing and studying disease systems (both cell and animal based models) utilizing cutting-edge technologies.

We recently identified two independent pathways involved in the pathogenesis of Stargardt retinopathy (STGD1) which implicate the retinal pigment epithelium (RPE) as the primary site of the disease: (1) accumulation of toxic vitamin A byproducts derived from the visual cycle for rhodopsin regeneration; and (2) dysregulation of the complement system in the RPE. Exploring the intersection of these pathways is the basis for this postdoctoral fellowship supported by an NEI R01 grant.

The postdoctoral candidate will be expected to design and perform the relevant functional studies. The candidate will also be tasked with elucidating the mechanisms by which ABCA4 mutations result in STGD1 phenotype. This will be accomplished by using cell based methods (primary fetal human RPE cells and iPS-derived RPE cells from STGD1 patient's fibroblast cells) and implementing in vivo experiments using animal models.

Candidates are expected to hold a Ph.D. and/or M.D. with less than 2 years of postdoctoral experience, be self-motivated and demonstrate a record of research achievement. A strong background in biochemistry, cell biology, molecular biology, and genetics in the field of ophthalmology is highly preferred. Expertise in mouse genetics, biochemistry, cell biology, primary cell isolation, cell transfection, cell-based assays, nucleic acid and protein manipulation, data analysis and proficiency in microscopy are necessary.

Applicants should email their resume to Dr. Radu at radu@jsei.ucla.edu.