



**Hyderabad Eye Research Foundation,  
L V Prasad Eye Institute, Hyderabad**

**Research Positions Available**

Hyderabad Eye Research Foundation (HERF) which is the research arm of the L V Prasad Eye Institute, Hyderabad (LVPEI) is a DBT Centre of Excellence for Translational Research on Eye Diseases. We have a basic research faculty of 12 working in all areas of eye biology and vision, 40 clinical faculty and about 20 graduate students and postdoctoral fellows. Our research is funded by DBT/DST/CSIR/ICMR as well as international agencies such as the Wellcome Trust UK, Champalimaud Foundation Portugal, NIH USA, VISION CRC of Australia, and several bi-national collaborative programs. We are recognized by the University of Hyderabad and BITS-Pilani, for the Ph.D. degree programme.

We are looking to recruit research personnel in the areas of interest given below. Positions are available for immediate recruitment, and will be filled following interviews.

Sl. no.	Position	Qualification	Experience
1	Post Doctoral Fellows	Ph.D.	Fresh or 1–2 years experience
2	Senior Research Fellows	M.Sc./B.Tech.	2 years experience in research
3	Junior Research Fellows	M.Sc.	Fresh or 1 year experience
4	Project Fellows	M.Sc./B.Tech.	Fresh or 1 year experience
5	Technician	B.Sc. + MLT/DMLT	Fresh or 1 year experience

The areas of research where these positions are:

- 1. Genomics:** MicroRNA profiling and characterization in age-related eye diseases and their responses to therapy; Genetic epidemiology of age-related eye diseases like glaucoma, cataract, age-related macular degeneration, diabetic retinopathy and cataract; Genetic analysis of retinal dystrophies; Identification of biomarkers for risk prediction and disease progression in diabetic retinopathy.
- 2. Cell Biology and Stem Cell Biology:** Exploring the application of pluripotent and adult stem cells in the treatment of retinal and corneal disorders; Differentiation of human ES and iPS cells (generated from patient's own skin cells) into retinal cell types such as photoreceptors and RPE cells; Establishment of gene corrected controls of patient specific iPS cells and assessment of physiological changes *in vitro*; *In situ* gene repair using genome editing methods.
- 3. Biochemistry:** Role of lens proteins (crystallins) in the development of the eye.
- 4. Ocular Microbiology:** Bedside diagnosis of corneal infections using a pathogen responsive polymer, functionalized with end groups that bind specifically to bacteria or fungi, with colour changes as readout; Biocompatible and biodegradable synthetic polymers as scaffolds for growing tissues; Functional genomics of host factors and resistance in microbial infections.
- 5. Photo Mechanics and Finite Element Modelling:** To study the changes in the optical quality in different parts of the eye due to physiological changes; Advance live cell imaging in the eye; Cellular mechanics and mechanobiology of the eye.

For further details on the research work, list of publications and other relevant matters kindly visit the website [www.lvpei.org](http://www.lvpei.org), and click on 'research'. Please send your detailed CV and research interest to **Elena D. Roopchandra**, Assistant Director-HERF, L V Prasad Eye Institute, Road Number 2, Banjara Hills, Hyderabad 500 034; e-mail: [elena@lvpei.org](mailto:elena@lvpei.org) on or before **21 October 2013**.