

# CTSA Program KL2 Scholar in the News:

Glaucoma from treatment failure is a leading cause of blindness in the world.

HIV infects humans via the CD4+T-Cells:

- Screened the human corneas of glaucoma patients and found the presence of new drug efflux transporters leading to drug resistance.
  - Method of use patent filed for clinical demonstration of vision restoration in a female subject with prolonged glaucoma history.
- Screened the fresh blood isolate of CD4+T-Cells and found the presence of new drug efflux transporters leading to decreased absorption of HIV drug (Tenofovir).



“We identified the presence of new drug efflux transporters resulting in Multi Drug Resistance on cornea (primary barrier for topical ocular drugs) and CD4+T-Cells (primary site of HIV infection in Humans). The findings provided new clinical insights for developing improved treatment regimens for Glaucoma and HIV..”  
– Pradeep K. Karla, PhD

