

## Siya's incredible tale of inheritance



Aboobacker, a caring father of two from Kerala, had suffered from retinoblastoma as a child. A chance inspection by his mother to rule out eye injury at play led to the discovery of “specks” in both the eyes, which turned out to be cancer, and it was too late to save one of his eyes. He has partial vision in just his right eye with which he manages some basic office work to support his family. To compound his sorrow, Aboobacker's first born, a boy, was also diagnosed with bilateral retinoblastoma. His condition, sadly, mirrored his father's – though diagnosed relatively early, the baby's right eye had to be removed when he was four months old. He too retains partial vision in his left eye and has been able to go to school, currently in 8<sup>th</sup> grade.

When Siya was born two years ago, Aboobacker and his wife were ready for the worst. Sure enough, an eight-day old Siya was diagnosed with the same condition and referred to LVPEI's Institute for Eye Cancer as it is reputed to be the best for such cases. The couple immediately rushed her to Hyderabad where Dr Swathi Kaliki was able to save both Siya's eyes. She retains perfect vision in one eye and partial vision in the other, and can look forward to an entirely normal life. For Aboobacker and Siya, the 36-hour train journeys from Kerala to Hyderabad every three months for checkups, are now a journey of gratitude.

## Internship at LVPEI

*The very thought of a Grade XII student doing an internship at LVPEI is awesome. I had the privilege, from 19<sup>th</sup> to 27<sup>th</sup> November, of interacting with LVPEI's doctors and engineers. A guided tour of their rehabilitation centre had me see almost all the ways in which people with reduced vision or blindness can continue to live a normal life with the help of tools ranging from putting rubber bands on containers to identify them, to state-of-the-art text-to-speech softwares and even a 3D vision correcting tool. I observed Dr Nandhini and Dr Matthew work on an application to analyze the neuropsychology underpinning of perceptual experience, and Dr Somasheila Murthy in OPD had me realize that ophthalmology and optometry are subjects of vast study. Dr Virender Sangwan interacted with me on eye imaging techniques and I was guided on this by Mr Kiran Challa.*



*At the microbiology lab, Dr Savitri Sharma showed me the extraction of a sample of cornea, culturing and observing it under a microscope, and Dr Shivaji, who has been to both the Arctic and Antarctic, shared some of his experiences in Biology - it was an educative experience indeed.*

*My visit to Srujana, the Innovation Centre, led me to meet Dhruv Joshi and other Engineers who are working with world class eye specialists to ease the workflow of detecting and diagnosing eye problems. It is an awesome application of MITs **Rethinking Engineering Design eXecution** principle. I got to see them demo all their prototypes, and this has given me an insight into a lot of things, led me to work on a few tasks and made me realize that being an engineer is no hurdle to improve the lives of others.*

Sanketh  
Grade XII, Meridian School, Banjara Hills, Hyderabad