



May 2021 at LVPEI

The ferocity of the second wave of Covid affected far more individuals during this month, directly or indirectly, causing widespread distress. Our services and other activities were significantly affected. We feel sad to inform that we lost one of our colleagues and a few others lost their family members. We share the grief of these families and offer our heartfelt condolences.

Against this darkness, however, there was a cause for cheer when the survey by the popular newspaper, Times of India, voted our Hyderabad campus as the “Best Eye Hospital” in the country once again (third year in a row). Our Vijayawada and Visakhapatnam campuses secured the ninth and eleventh positions among the eye hospitals in South India. We are delighted with this recognition, thanks to the diligence of all members of our team.

Global collaboration is becoming increasingly critical to understand the basis and to find solutions for health problems. Our public health group, headed by Rohit Khanna, has been at the forefront of such an effort from our Institute. In collaboration with the Queen's University, Belfast, and in alliance with nearly 30 other partners in the US, UK, Vietnam, Bangladesh, Zimbabwe and India, they are working on a series of studies to explore the impact of vision care at the global level in achieving the sustainable development goals (SDGs) in low and middle income countries. The funding support was secured from the Wellcome Trust and the Yet-Sen Family Foundation. This effort focusses on enhancing learning opportunities for millions of African children with appropriate correction of long sightedness, slowing the onset of cognitive decline and dementia in the elderly struggling with poor sight, improving economic independence for the elderly by helping them to do online banking using smart phones and reducing road traffic injuries. Congratulations to the team on this very ambitious undertaking.

A few other accolades received by our team members deserve a special mention. Javed Ali, Alumni Chair of Ophthalmology and Head of Govindram Seksaria Institute of Dacryology, continued his honours spree with his appointments as DAAD Professor of Ophthalmology and Anatomy in the Bavarian state (Southeast Germany) and to the editorial board of the journal “Ocular Immunology and Inflammation”. Rohit Khanna was elected as the Regional Chair of the International Agency for the Prevention of Blindness (IAPB) for Southeast Asia for a four year term. Our doctoral students Poonam Naik, Jaishree Gandhi and Madhuri Amulya received international and national awards.

A problem of increasing concern this month was the high rate of Mucormycosis (black fungus) in India especially among the victims of Covid 19, particularly affecting those with poorly controlled diabetes and an immune compromise. The most common form - rhino-orbital-cerebral mucormycosis (ROCM) - typically starts in the nose/sinuses and invades the adjacent orbit (eye) and brain. Mucormycosis is a medical and surgical emergency necessitating prompt intervention along with systemic antifungal drugs. Despite treatment



only one out of two patients survive. Unfortunately, the acute shortage of antifungal drugs created a mammoth crisis. Our orbital team across the network formed a task force, developed guidelines for care, and introduced a hotline for emergency calls. They also entered into partnership with multi-speciality hospitals to provide a comprehensive strategy to deal with this problem. Our teams were kept very busy treating scores of victims who reported with this problem. Our microbiology and pathology teams with significant expertise in these infections were an added asset to our armamentarium to deal with this unanticipated epidemic.

As the demand for accessing care from a distance increased due to travel restrictions and safety measures against Covid, yet another Tele-ophthalmology Command Centre was inaugurated in our Bhubaneswar campus. The benefits of “Connect Care”, our technology innovation, are becoming more important with many of our patients, with complex problems requiring regular follow up care, served through this approach.

One form of children’s eye cancer, Retinoblastoma has its highest prevalence in India. Early diagnosis and prompt treatment can significantly avert loss of life, and save the eye and sight in a high proportion of such cases. To this end, our team from the “OEU Institute for Eye Cancer” led by Swathi Kaliki initiated a major event to raise public awareness about the problem and for resource mobilization to provide care to the economically underprivileged. This marathon, named “WHITATHON” was started three years ago with active participation by a good cross-section of the citizens. This year it was a virtual, week-long event with participation from 24 different locations including 39 international participants. Through the activities of cycling, running and walking, the participants clocked a total of 2250.5 km. The partners included Hyderabad Runners, Alcon, RailTel and Techwave with LifeCykul as our registration partner. We are grateful to all the participants, donors and supporters. Through these efforts, we may be able to break the cycle of morbidity and mortality among children suffering from this malignant disease.

Our focus on Children’s Eye Health and controlling childhood blindness is very comprehensive covering all major causes. In this effort, we have made significant progress in the area of ‘Retinopathy of Prematurity (ROP)’. In addition to providing direct care to these babies at our Institute, we have started scaling up these efforts through advocacy with the government. In Odisha state, we have already contributed to the capacity building of the state government’s programme in this area over the past few years. We are pleased to receive official recognition as the “Pivotal Centre” for the care of ROP from the Government of Odisha.

Let me conclude with this story of an exciting journey of one of our doctoral students, Sanjukta Guha, who submitted her PhD thesis at Manipal Academy of Higher Education for her work on the role of SLC4A11 in CHED. Under the guidance of Dr. Sanhita Roy, Sanjukta finished her research in five and half years, and published in leading international journals like Scientific Reports, Cornea and Free Radical Biology and Medicine. During her



PhD tenure, Sanjukta received many prestigious honours including best poster award at ARVO-IERG, selected for oral presentation at the Gordon Research Conference, and the Joanne G Angle Travel Award at ARVO 2020. There are many “firsts” and novel findings in this project. We were first to identify oxidative stress as pathogenesis of CHED and reported the role of SLC4A11 in antioxidant signalling. We were also first to decipher the transcriptional and translational regulation of SLC4A11 by NRF2. This study was conducted in collaboration with Dr. Sunita Chaurasia and Dr. Muralidhar Ramappa, and a clinical trial has been initiated by Dr. Ramappa based on the outcome. This is the outcome of “crosstalk” that happened between clinicians and scientists; a true example of a translational research project initiated in the laboratory and further taken to the clinics.

- Gullapalli N. Rao