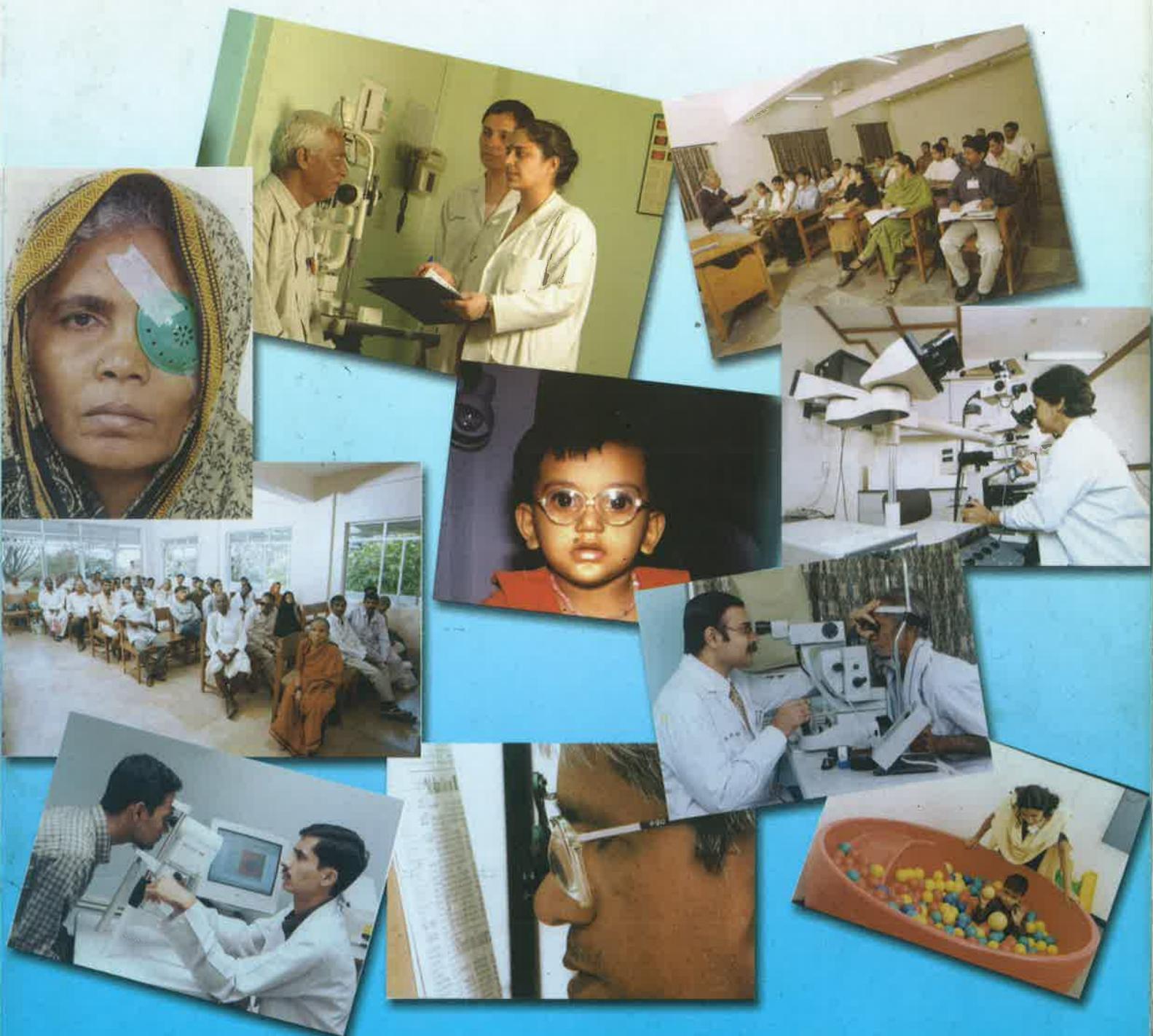




# L V Prasad Eye Institute



**Annual Activity Report  
April 2003 - March 2004**

*Committed to excellence and equity in eye care*



**"The Transformation - Two in one"**

by Sisir Sahana

Sculpture in glass 26"x10"x4", 2004

*Sisir Sabana has won wide acclaim for his striking glass reliefs. Pranabranjan Ray says Sisir's glass fossils are about emotions and perceptions frozen and embedded as memory under layers of transparent and translucent glass. Sisir is an artist in residence at LVPEI and has contributed several of his works to the Institute.*

LIBRARY  
L V PRASAD EYE INSTITUTE  
Road No. 2 Banjara Hills  
HYDERABAD - 400 034



## L V Prasad Eye Institute

### Our Mission

The mission of L V Prasad Eye Institute is to be a centre of excellence in eye care services, basic and clinical research into eye diseases and vision-threatening conditions, training, product development, and rehabilitation for those with incurable visual disability, with a focus on extending equitable and efficient eye care services to underserved populations in the developing world.



**World Health Organization  
Collaborating Centre for  
Prevention of Blindness**



## L V Prasad Eye Institute

L V Prasad Marg, Banjara Hills  
Hyderabad 500 034, India

The L V Prasad Eye Institute is a not for profit charitable organization managed by two trusts: the Hyderabad Eye Institute and the Hyderabad Eye Research Foundation.

### Director

Ravi Thomas

### Cornea, Cataract & Anterior Segment

Virender S Sangwan  
Prashant Garg  
Nibaran Gangopadhyay  
Somasheila S Murthy  
Gullapalli N Rao  
M S Sridhar

### Glaucoma

G Chandra Sekhar  
Anil K Mandal  
Rajul Parikh  
Ravi Thomas

### Retina Vitreous

Taraprasad Das  
Nazimul Hussain  
Anjli Hussain  
Subhadra Jalali  
Ajit B Majji  
Annie Mathai  
Avinash Pathengay

### Pediatric Ophthalmology

Anil K Mandal  
Nibaran Gangopadhyay  
Subhadra Jalali  
B Venkateshwar Rao  
Ravi Thomas

### Strabismus & Neuro-Ophthalmology

B Venkateshwar Rao  
Ravi Thomas

### Uveitis & Ocular Immunology

Virender S Sangwan  
Somasheila S Murthy

### Ophthalmic Plastic Surgery, Orbit and Ocular Oncology

Santosh G Honavar  
Milind Naik  
Vijaya Anand P Reddy

### Comprehensive Ophthalmology

Rohit Khanna  
Sushma Tejwani

### Laser Refractive Surgery

Prashant Garg  
Nibaran Gangopadhyay  
M S Sridhar

### Sight Enhancement

Sarfraz Khan  
Vijaya K Gothwal

### Contact lens

Nibaran Gangopadhyay

### Rehabilitation

Sharmila Rao  
Beula Christy

### Internal Medicine

Sujatha Mathur  
Archana Bhargav

### Research

D Balasubramanian

### Microbiology & Immunology

Savitri Sharma  
Usha Gopinathan

### Molecular Genetics

Chitra Kannabiran  
Subhabrata Chakrabarti

### Ophthalmic Pathology

Geeta K Vermuganti

### ICARE

B R Shamanna  
Rahul Kumar Ali  
S Bhattacharya

P Giridhar

S Krishniah

V Rajashekhar

N Rishita

Kovai Vilas

Jachin David Williams

### Optometry

N Arivazhagan  
T G Kapila  
P Ruby Kala  
Ashutosh Kumar  
K Vasantha Kumari  
Kuldeep Raizada  
D Deepa Rani  
Mahesh

Mohan Ram  
Prabakaran  
Preeji Mandathra  
D Srikanth  
M Srinivas  
Sumasri  
S Thennarasu

### Bausch & Lomb School of Optometry

Coen GA de Jong  
S Jagannathan  
Vallam Srinivasa Rao

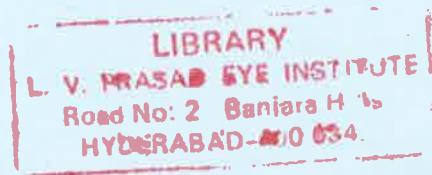
### Administration

V L Ramam  
S Balasundaram  
M Srinivasa Rao  
P Sridevi

# LV Prasad Eye Institute

## Annual Activity Report - April 2003 to March 2004

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# Foreword

By Prof Ravi Thomas, MD



Dear friends,

I consider it a privilege and honor to take over as Director of the LV Prasad Eye Institute. As I prepared for this task, the two questions I was asked most frequently were "Are you nervous?" and "What is your vision for the Institute?" The answer to the first question was a straightforward, "Yes". Who wouldn't be? I must admit though that the second question quite foxed me. It was almost as though I was expected to, or had to do something different. I had to give this second question a lot more thought and, finally, could only come up with a question of my own. "Is there anything wrong with the current vision?" Did I have to do something different just because it was expected, or for the sole purpose of trying to leave my own mark? Nag's vision, the current vision of LVP to be a center of cutting edge ophthalmology with operating values of excellence and equity are ideals good enough for the future and for any future director as well.

I don't know why Nag chose me for this post, but perhaps it was partly because I am in total agreement with the current mission and values of LVPEI. From a personal point of view, for the second time in my life I find myself in a position to nurture something that I believe to be of immense importance and help it thrive. The 20 months that I spent in transition at LVPEI, preparing for my new responsibility only served to convince me that the Institute is headed in the right direction. In that sense, the fact that LVP has a new director does not mean there is a new beginning. It just means a continuation of purpose with a reaffirmation of LVPEI's vision and mission.

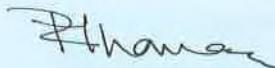
As I begin my first year as Director of this internationally acclaimed organization, let me start by reassuring all our friends, supporters and well-wishers that there will be no tangent or change in direction. We recommit ourselves to VISION 2020 and our values of excellence and equity with care delivered in a kind, caring and compassionate manner. We will also continue to pursue and strengthen the current operating arms of the Institute: Patient Care, Education, Eye Research, Low Vision & Rehabilitation, Community Eye Health and Product Development. This is what we are good at and are passionate about. The operating style may be a just a little different and my own interest in clinical epidemiology and evidence based ophthalmology will be blended into the process.

So what happens to Nag? He just wanted to leave me alone but has kindly agreed to continue on the Faculty at LVPEI. Amongst other

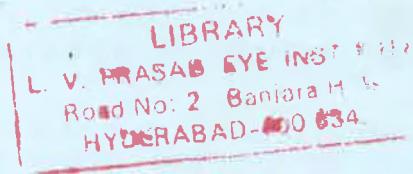
responsibilities, I have requested him to oversee his pet project - delivery of eye care to the underserved communities and the replication of LVPEI models in rural areas and perhaps around the world.

Since its inception, the L V Prasad Eye Institute has achieved dramatic progress during what I call the 'sprint' phase. I now solicit your support to see us through the 'marathon'.

Yours sincerely,



Prof Ravi Thomas MD



## A snapshot of Prof Ravi Thomas

By Dr Gullapalli N Rao

Clinician, surgeon, teacher, and researcher par excellence, Prof Ravi Thomas was formerly Professor and Head of Department of Ophthalmology at Christian Medical College and Hospital (CMC), Vellore. He is also a visiting professor and alumni lecturer at Sydney Eye Hospital, Sydney University, Australia. In addition, Ravi is a visiting professor at numerous institutions and an invited lecturer at many prestigious conferences all over the world.

Prof Thomas did his postgraduate ophthalmology training (residency) from Dr Rajendra Prasad Centre for Ophthalmic Sciences, All India Institute of Medical Sciences, New Delhi. He did a fellowship in glaucoma from the Tennent Institute of Ophthalmology at Glasgow, UK. He also did fellowships in strabismus and glaucoma with Prof Frank Billson at Sydney University in Australia. Ravi's interests include glaucoma, pediatric ophthalmology, and cataract surgery, in all of which he is internationally recognised.

Ravi is an exceptional teacher and passionate about quality. His strength in clinical epidemiology and evidence based ophthalmology couldn't have come to LVP at a more opportune time. During his tenure at CMC, Vellore, he built one of the country's most reputed residency training programmes in ophthalmology there.

Prof Thomas has inherited a commitment to rural eye care from his parents - both distinguished ophthalmologists, they chose to live in a small village Dhar in rural Madhya Pradesh for 42 years, dedicating themselves wholly to eye care for the underprivileged. An authority in several subspecialties of the eye, Prof Thomas has written landmark papers in glaucoma. Very much a family man, LVPEI's multi-hued Director's other interests include karate and meditation.

# An eventful year



## A Moment in Time

L V Prasad Eye Institute witnessed a landmark in its evolution on April 04, 2004, when after 17 years of being at the helm, Founder - Director Dr Gullapalli N Rao passed on the baton to LVPEI's new Director Prof Ravi Thomas. The highlights of the programme organized to celebrate this momentous event were a 'Thanksgiving' ceremony for all supporters and friends who have been partners in the Institute's development over the past 17 years and the first leadership changeover ceremony.

It was an evening full of nostalgia, warmth and humor, as well as hope and the vision for tomorrow. Dr Rao spoke of all that LVPEI had accomplished in these years. Some of the Institute's largest donors - individuals, organisations and corporations whose contributions enabled Dr Rao to realize his dream - were recognized and felicitated on the occasion. They, in turn, paid rich tributes to a visionary and an institution that had inspired their generosity and support. Prominent among the distinguished speakers were Prof Brien Holden, Director, Vision Cooperative Research Centres, and Scientia Professor, University of New South Wales, Australia; Dr Pararajasegaram of the World Health Organisation and former President, International Agency for the Prevention of Blindness; Dr Jayaprakash Narayan of Lok Satta; Dr Badrinath of Sankara Nethralaya, Chennai; Dr Tewari, Dean of All India Institute of Medical Sciences; Dr B T Maskati; and Dr Natarajan of Mumbai. Dr Sriram Sonty, who has been closely associated with the Institute since its inception, presented a great profile of his link to LVPEI. LVPEI's alumni was represented by Dr Sangeeta Wagh from Pune.

As a farewell gesture, some of the family and friends of LVPEI established a 'Village Vision Fund' to raise funds for setting up vision centres in Andhra Pradesh in the names of Pratibha and Gullapalli N Rao, for providing primary eye care in underserved rural areas. The first cheque of about Rs 800,000 was handed over to Prof Ravi Thomas.

This was followed by the screening of Zafar Hai's documentary on LVPEI '**So that they may see**' a film that has captured the essence of LVPEI in the finest possible way.

Finally, Dr Rao introduced his successor Prof Ravi Thomas. Prof Ravi Thomas's teachers, Prof Frank Bilson of the Save Sight Institute, University of Sydney, New South Wales, Australia, and Dr JP Mulyil from Christian Medical College, Vellore, recalled their association with him and gave the rapt audience an insight into the personality of the incoming Director.

To commemorate this milestone, LVPEI also organized an international eye health symposium '**Technology to Trends: Perspectives on research and practice in ophthalmology**' during April 3 - 5, 2004. The symposium was attended by ophthalmologists from all across India and the faculty comprised some of the most eminent names in ophthalmology in the world.



Mrs Vijaya Ramam, Mrs Pratibha Rao, Dr G N Rao, Prof Ravi Thomas and Dr G Chandra Sekhar at the programme on April 4, 2004

## The Presidential Visit

L V Prasad Eye Institute was privileged to play host to **His Excellency Dr A P J Abdul Kalam, President of India**, on January 18 and 19, 2004. President Abdul Kalam inaugurated the **Sudhakar and Sreekanth Ravi Stem Cell Biology Laboratory** at the Institute and released a special postal cover to commemorate the **golden jubilee of the Indian Journal of Ophthalmology** on 19th January. Impressed by the ongoing work at LVPEI the President quipped, "If I were to choose another career, it would be ophthalmology," adding that he would like to work here after his retirement. The President made a generous gesture by having an informal dinner with the Institute faculty and their families on the night of 18th January.



President Dr Abdul Kalam meets two children from Bangladesh who have benefited from stem cell transplants at LVPEI

## History made in Corneal Transplantation

Our Cornea Services performed more than 1000 corneal transplant procedures during this year and reached a new milestone in corneal transplantation - perhaps the highest number ever from a single centre anywhere in the world.

## Partner in VISION CRC, Australia

Our Institute is one of the four core partners in the VISION Cooperative Research Centre (VISION CRC), the others being the Institute for Eye Research from Sydney, International Centre for Eye Care Education from Sydney, and the Centre for Eye Research Australia from Melbourne. The VISION CRC is the largest CRC funded by the Australian government and will receive \$ 32 million over seven years. The main objective is to work towards solutions for blindness prevention and correcting refractive errors.

## Eye Bank Resource Centre inaugurated

The former Chief Minister of Andhra Pradesh Shri Chandrababu Naidu inaugurated the **ORBIS-ESI-LVPEI Training & Resource Centre For Eye Banking & Corneal Transplantation** at LVPEI in September 2003. Among the guests at the inauguration were Hannah Faal, President - IAPB, Serge Resnikoff, Coordinator - WHO Program for Prevention of Blindness and Deafness, and Kathy Spahn, CEO - Orbis International, USA.

## Personal Achievements

The highlight of the year was **Dr Anil Kumar Mandal**, Head of the Children's Eye Care Centre and senior consultant in glaucoma services, being awarded the prestigious **Shanti Swarup Bhatnagar Award for 2003** for his contributions to medical science. Dr Mandal has successfully treated over 500 infants who were born with vision threatening conditions and has popularized new surgical and management techniques in developmental glaucoma suitable for the Indian subcontinent. He has also pursued molecular genetics research in primary congenital glaucoma and identified mutations in the genes present in this disease. He is the first ever ophthalmologist to receive this award.

This year saw the **American Academy of Ophthalmology (AAO)** honour three of our senior faculty with the **Achievement Award**; they are **Dr Savitri Sharma, Dr G Chandra Sekhar** and **Dr Taraprasad Das**. LVPEI is the first institute from India to have the distinction of three honour awards during the same year and a total of six awards overall from the American Academy of Ophthalmology.

**Prof Indira Nath**, who is a member of our Board of Trustees, received the prestigious **Honorary Doctor of Science** award from the University of Paris, France.

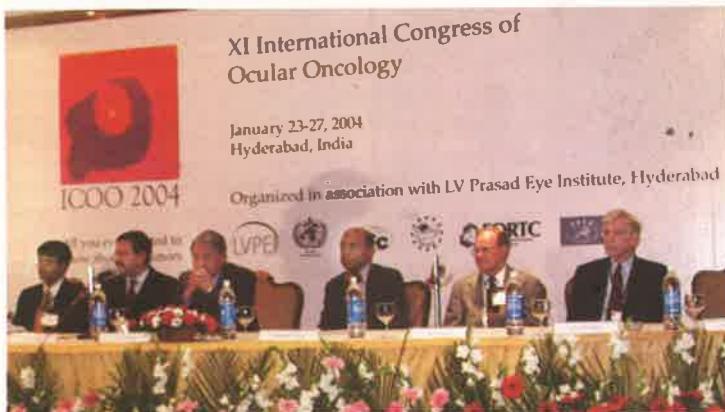
**Prof Coen de Jong**, Director of Education Development and Kismatpur campus, LVPEI, was decorated by the Queen of Netherlands with a Royal Decree '**Officer in the Knight's Order of Oranje-Nassau**', at The Hague on April 29, 2003. (Oranje-Nassau is the name of the royal family of Netherlands). Prof Coen says, "This honour came as a big surprise. When this very special decoration was pinned on the lapel of my jacket I was told that it was given to me for my service and activities not only to the Dutch people but also for my activities abroad. A special mention in the citation was about my contribution to projects in India as well."

## Another Exclusive Facility

A Children's Eye Cancer Centre was also inaugurated at LVPEI while the ICOO was being held; it has been set up with a substantial grant from Sight Savers International, UK. The Children's Eye Cancer Centre is a part of the only Ocular Oncology Centre in India, also at LVPEI, and the only one of its kind in the developing world.

## ICOO - A Feather in Our Cap

A feather in the cap for LVPEI was the successful hosting of the **XI International Congress of Ocular Oncology (ICOO)** from January 23 - 27, 2004. Over 500 delegates - pioneers and outstanding faculty in ocular oncology - from 52 countries came to Hyderabad to participate in the epoch-making congress, which was being held outside Europe and USA for the first time. The guests of honor at ICOO were Alfred Knudson, Peter Lommatszch, Anna T Meadows, and Jerry and Carol Shields, the who's who of ocular oncology.



Dr S Honavar, Dr Arun Singh, Prof H K Tiwari, Dr G N Rao, Prof Lommatszch and Dr Jerry Shields at ICOO

## World Sight Day observed

**World Sight Day** was commemorated on October 8 - 9, 2004, at Jawahar Bal Bhavan in Hyderabad, in collaboration with the Andhra Pradesh Right to Sight Society and Rotary International District 3150 as part of LVPEI's Avoidable Blindness Programme. Among the events organized by the Institute were a poster gallery to impart information about eye diseases, a demonstration of vision enhancing devices, an awareness center for eye donations, as well as a free vision screening drive. Almost 10,000 persons, most of them schoolchildren, visited the exhibition during the two-day event.



## Personal Achievements

**Prof Ravi Thomas, Director, LVPEI,** was inducted as a member of the Glaucoma Society of the International Congress of Ophthalmology at their meeting in Chantilly, France, the first from India to receive this honour.

**Dr Gullapalli N Rao** received the first **Global Visionary Award** instituted by Bausch & Lomb, USA, at the annual meeting of the American Academy of Ophthalmology (AAO) in November at Anaheim, California. Bausch & Lomb had announced the creation of the 'Global Visionary Award in Ophthalmology' in celebration of their 150th anniversary. Dr Rao was chosen for this prestigious honor in recognition of his overall contribution to global eye care.

In November 2003 Dr G N Rao was elected **fellow to The Royal College of Physicians and Surgeons of Glasgow**. He received the fellowship in a ceremony at the University of Glasgow, Glasgow, UK.

Dr Rao was also awarded the HRH Prince Abdulaziz bin Ahmed bin Abdulaziz Al-Saud Award for Prevention of Blindness at Riyadh, Saudi Arabia, in March 2004.

With effect from April 1, 2004, Dr G N Rao has taken over as **Chief Executive of the International Agency for the Prevention of Blindness (IAPB)** and its VISION 2020: The Right to Sight programme. As its Chief Executive Dr Rao will coordinate the efforts of IAPB to reduce and prevent blindness across the world, in conjunction with the World Health Organization. Dr Rao is also currently President - Elect of the IAPB.

## Journal of Community Eye Health - Indian Edition



The Indian Supplement of the Journal of Community Eye Health published by the International Resource Centre, International Centre for Eye Health (ICEH), London School of Hygiene and Tropical Medicine (LSHTM), UK, has been revived from the January 2004 issue by ICARE - LVPEI for the VISION 2020: India NGO/INGO forum. In addition to being the official publication of the forum the Indian supplement will provide a medium for dissemination of eye health information for those doing yeoman service in the field of eye care.

### Endowment lectures & public awareness programmes

The **Dr Rustam D Ranji Public Lecture 2003** was delivered by **Dr Jayaprakash Narayan, National Coordinator of Lok Satta**, the grassroots movement working towards reforming the fundamental structure of Indian governance. The Rotary Club of Hyderabad and LVPEI hosted this prestigious lecture at the institute on September 17, 2003. Dr Jayaprakash Narayan was at his eloquent best as he spoke on 'Ensuring a healthy future'.

**Dr Richard Piers Lesley Wormald**, consultant ophthalmologist, Moorfields Eye Hospital and Honorary Senior Lecturer at the Institute of Ophthalmology (London, UK), delivered the eighth **Prof C Syamala Bhaskaran Endowment Lecture** at LVPEI on December 13, 2003. He spoke on '**Evidence-based Medicine**', which necessitates the use of clinical methods for diagnosis and treatment with a direct focus on the outcome.

The **Late Shri Pushkarlalji Tibrewala Public Lecture 2004** on '**Corneal Transplantation: Recent Advances**' was delivered on February 17, 2004, by Dr Roberto Pineda, Chief of Ophthalmology at the Brigham and Women's Hospital at Boston, USA. Dr Pineda is also associated with the Refractive Surgery Unit at the Massachusetts Eye and Ear Infirmary.

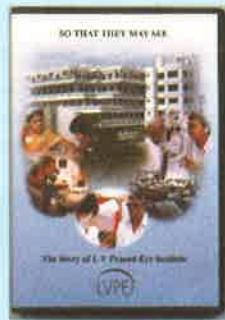
**STEMSEM: Update seminar on stem cell research in India** was held at LVPEI from March 8 - 9, 2004. The seminar had state-of-the-art lectures on stem cell technology, invited presentations from national laboratories, and introductory lectures on the theory and applications of embryonic and adult stem cell biology.

Interactive public seminars on **Diabetes and the Eye** and **Age-Related Macular Degeneration** and **Photo-Dynamic Therapy** were held in collaboration with Rotary International District 3150.

The nature of what makes science news, and why, was the subject of a debate among media representatives and LVPEI faculty and fellows on December 14, 2003. The symposium '**From Science Making to Sense Making**' was organised by the Indian Journal of Ophthalmology. Noted scientists and media professionals participated in the panel discussions.

### A documentary on LVPEI

This year also saw the completion of the much-awaited documentary on LVPEI '**So that they may see**'. The 17-minute documentary film on the evolution of L V Prasad Eye Institute has been made by acclaimed director Zafar Hai, with the voiceover by noted theatre personality Roshan Seth. The film's title 'So that they may see' embodies Dr G N Rao's vision for eye care in India and the inspiration that made his dream a reality. It was Dr Virender S Sangwan who mooted the idea for the film. From the very first time he heard the story of LVPEI from Dr Rao, Dr Sangwan wanted it to be made known to a wider audience. Mr Ramesh Prasad (son of Mr L V Prasad) introduced Zafar Hai to Dr Rao, who was moved by the work done at the Institute and felt there was potential for a film. The elegant film captures the essence of the Institute and the story of its growth.



### LVPEI on BBC Radio 4

Filmmaker Julia Shaw and BBC reporter Gary O'Donaghue from the United Kingdom came to Hyderabad to make a programme on the L V Prasad Eye Institute. The half-hour documentary **Second Sight** was broadcast by BBC's channel for "intelligent speech" Radio 4 on March 17, 2004. The programme was part of IAPB's efforts to increase awareness about the Vision 2020: The Right to Sight initiative. The focus was on LVPEI as a flagship hospital for the implementation of the Vision 2020: Right to Sight programme. As a Centre of Excellence the Institute has set an example for others to emulate. Other focus areas were its cutting edge research on stem cells and glaucoma, reducing the incidence of ROP, community and outreach programmes, and vision rehabilitation measures.

## LVPEI Alumni

### International Ophthalmology Update

The LVPEI Alumni and LVPEI Faculty organized an International Ophthalmology Update on October 16, 2003, at the Institute. This was the second meeting of the LVPEI Alumni and it coincided with the Foundation Day celebrations of L V Prasad Eye Institute. Of special significance was the fact that this was the last year when Dr Gullapalli N Rao would preside as Director of LVPEI.

The LVP Alumni had invited the 'awesome threesome' - Dr Lalit P Agarwal, Dr James Acquavella and Dr Jules Baum, three of Dr Rao's most revered teachers in ophthalmology - to speak on the occasion. The senior faculty of LVPEI comprised the other speakers. The day-long seminar was open to ophthalmologists and fellows in training. There were interactive sessions on VISION 2020, low vision care, keratoprosthesis, advances in glaucoma management, laser refractive surgery, ocular surface neoplasia, evidence based medicine and other subjects.

### A time to remember

On October 17, 2003, the LVP Alumni celebrated the Institute's Foundation Day, nostalgically recalling the contributions made by Dr G N Rao in advancing their careers. They presented Dr Rao with a crystal plaque bearing the inscription "*Excellence, Endurance, Empathy - your gifts to us, thank you Dr Rao. LVP Alumni 1990 - 2004*".

A plaque announcing the formation of an endowment fund called the Dr G N Rao Endowment Fund was instituted to provide an impetus to fellows training at LVPEI. Dr Jules Baum also released a book of anecdotes about Dr Rao, '*Bow Tie and Cuffed Trousers*' compiled by the Alumni.

In an emotional response Dr Rao paid rich tributes to his colleagues, both past and present. He instituted two Chairs on the occasion: the Dr D Balasubramanian Chair for Research and the Dr G Chandra Sekhar Chair for Education, as well as a Center for Administration to honor Mrs V L Ramam. The LVP Alumni and fellows also had an interactive session with Dr Lalit Agarwal, Dr James Acquavella and Dr Jules Baum.



Dr G N Rao with ... Dr Lalit P Agarwal (left), Dr Jules Baum (centre) and Dr James Acquavella (right)

### Alumni News

#### Dr Sandeep Wagh Eye Centre at Pune

Dr G N Rao was the chief guest at the inauguration of the Dr Sandeep Wagh Eye Centre at Pune on December 7, 2003. The centre has been started by Dr Sangeeta Wagh, a former fellow at LVPEI, and is named after her late husband. The centre has top-of-the-line diagnostic and surgical equipment.

#### Quality Eye Care Centre in Mumbai

Dr G N Rao also inaugurated The Eye Super Specialities (TESS), a quality eye care centre at Ghatkopar in Mumbai, to provide high quality eye care services to the people of Mumbai and its surrounding areas. The centre has been set up by Nikunj J Shah and Urmi Shah, former LVPEI fellows. Nikunj did his fellowship in retina vitreous and Urmi did her fellowship in the cornea and anterior segment

here. TESS has three wings: the parent centre, an eye pavilion - an open diagnostic centre, and a peripheral centre. TESS has been set up as a collaborating centre with LVPEI.

#### ROP programmes in Kochi & Belgaum

Two of LVPEI's former retina fellows Dr Nikunj J Shah in Mumbai and Dr Biju Raju in Kochi have successfully set up a Retinopathy of Prematurity (ROP) programme in the Neonatal Intensive Care Units (NICU) in their areas to treat babies with ROP.

One of our former fellows in comprehensive ophthalmology, Dr Rohini Kothari, has started an ROP programme in Belgaum.

All former long-term fellows of L V Prasad Eye Institute are welcome to join the Alumni Association. Alumni news may be mailed to Srilakshmi at [alumni@lvpei.org](mailto:alumni@lvpei.org)

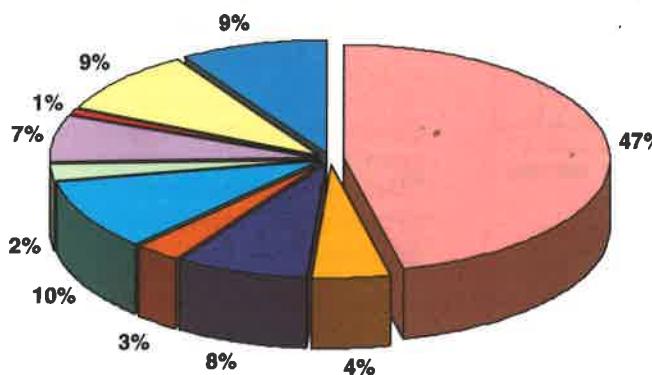
# Hospital

## Performance Statistics

L V Prasad Eye Institute is committed to providing excellent, efficient, and equitable eye care to each and every one of its patients. Approximately 50 percent of our services are rendered free of cost to the economically underprivileged. The highlight of the year was a significant increase in the number of children who came to us for treatment - 4852 as against 3945 last year.

Services	Paying	Non-paying	Total
Out-patient	1,30,548	54,947	1,85,495
Surgical procedures	12,959	9,992	22,951

## Analysis of surgical procedures



Cataract	10,673
Corneal transplantation	1,031
Other corneal procedures	1,873
Glaucoma	624
Retina	2,306
Squint	553
Plastic surgery	1,557
Lasik	192
EUAs*	2,089
Others	2,053

## Patients came to LVPEI from all over the world and from different parts of the country



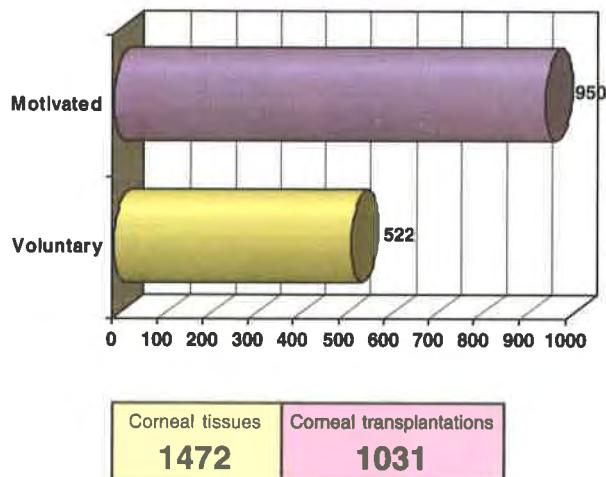
\*EUA: Examination and treatment of children under anesthesia

## Ramayamma International Eye Bank

A record number of corneal donations & corneal transplants!

*"The human race suffers needlessly from blindness and partial vision. The need for corneal transplants is acute. To give sight to the unseeing is a gift, and we feel privileged our Shrikant received this gift. We wish his two deserving beneficiaries good vision and health". (Words of an eye donor's relative)*

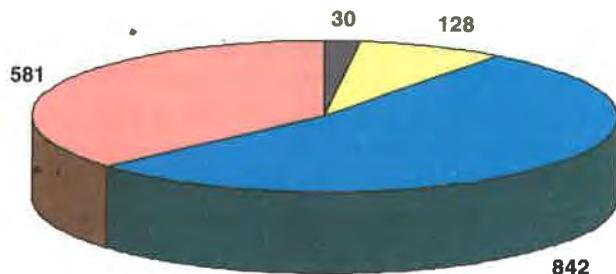
Corneal tissues donated to RIEB



- The total number of corneal tissues collected by RIEB this year was **1472**.
- Our corneal surgeons performed more than 1000 corneal transplants.
- RIEB also distributed tissues to corneal surgeons outside LVPEI for transplants.



Tissues received from affiliate centres



- RIEB affiliate centres at: Tanuku, Suryapet & Nidadavole
- EBCRC: Eye Bank Coordination & Research Centre (eyes received only for practice)
- Other Eye Banks in Andhra Pradesh
- Northwest Lions Eye Bank, Seattle, WA

The RIEB receives tissues from the following eye donation centres within Andhra Pradesh which are sent to RIEB and our affiliate centres at Tanuku, Suryapet and Nidadavole.

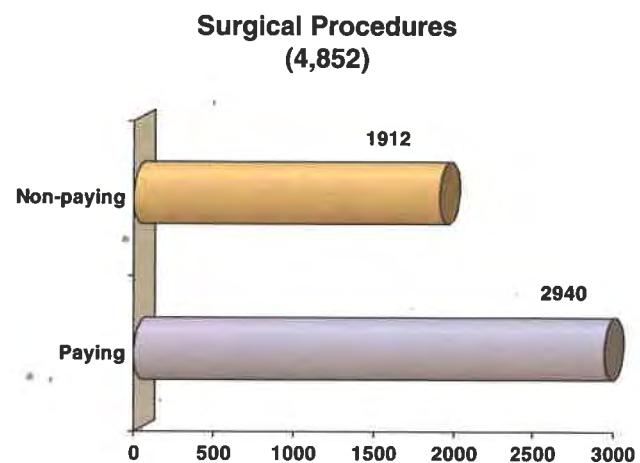
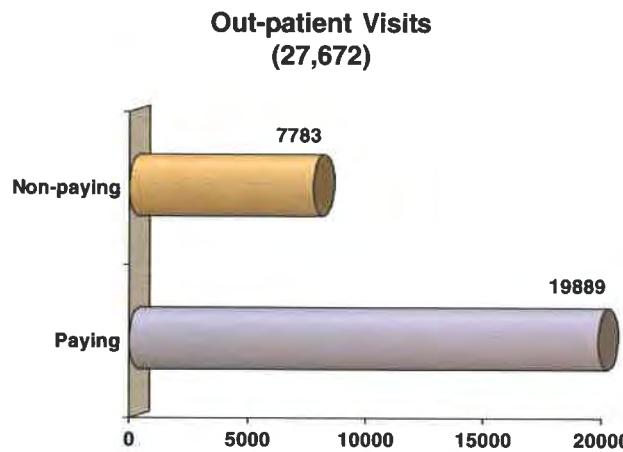
Khammam District Police Eye Bank, Khammam	Lions Club of Mancherial, Mancherial
The Khammam Eye Bank, Khammam	Lions Club of Janagaon, Janagaon
Vasavi Club of Bibipet, Bibipet	Lions Club of Mahaboobnagar, Mahaboobnagar
Vasavi Club of Siddipet, Siddipet	R R Lions Eye Hospital, Palakol
Vasavi Club of Ramayampet, Ramayampet	Saduram Eye Hospital, Hyderabad
Regional Eye Hospital, Warangal	Chiranjeevi Swatchanda Seva Samiti, Kamareddy
Jaya NGO Based Hospital, Warangal	Kalyai Nursing Home, Hanamkonda
Sri Saibaba Nethralaya, Repalle	Dr. Akbar Eye Hospital, Anantpur
Ongole Eye Bank, Ongole	Rotary Eye Hospital, Vuyyuru
Lions Club of Bodhan, Bodhan	Mahaveer Lok Seva Samiti, Raichur
Lions Club of Karimnagar, Karimnagar	District Hospital, Janagoan
Lions Club of Kamareddy, Kamareddy	Supraja Seva Samiti, Karimnagar
Lions Club of Khammam, Khammam	Chiranjeevi Praja Seva Samiti, Adilabad
Lions Club of Warangal, Warangal	Sukhabhogi Seva Samiti, Mancherial
Lions Club of Nizamabad, Nizamabad	Sudarshini Eye Hospital, Guntur

## Events

### ***Public awareness campaigns, cornea retrieval programme, educational programmes, research projects & other activities***

- **Public awareness programmes** were conducted throughout the year at major institutions and hospitals. The RIEB also observed the 18th National Eye Donation Fortnight from August 25 to September 8, 2003. The students of B & L School of Optometry joined the RIEB staff in conducting awareness programmes.
- **The Hospital Cornea Retrieval Programme** continues to grow from strength to strength. Due to the tireless efforts of grief counselors, posted at various multispeciality hospitals, over 65% of the corneas received were the result of motivation. This programme is sponsored by the Lions Club of Majestic, Hyderabad, and ORBIS-ESI.
- **ORBIS International - Eye Sight International - LVPEI (ORBIS-ESI-LVPEI) International Training & Resource Centre for Eye Banking and Corneal Transplantation** was inaugurated by the former Chief Minister of Andhra Pradesh, Mr Chandrababu Naidu, on September 26, 2003. Among the distinguished guests on the occasion were: Kathy Spahn, Chief Executive Officer, Orbis International, USA; Paul J Dubord, Chairman, Eye Sight International, Vancouver, Canada; Dr G V Rao, ORBIS Country Director; Adam Zayan, Senior Vice President, ORBIS; and Monty M Montoya, Chief Executive Officer of North West Lions Eye Bank, Seattle, USA.
- **The Indian Eye Banking Education Programme (IEBEP)** launched earlier under the ORBIS-ESI-LVPEI project was conducted at the Disha Eye hospital in Calcutta on September 6, 2003. The workshop was attended by 65 participants: ophthalmologists, eye bank managers, eye bank technicians, eye donation counselors, and other paramedical professionals and NGOs. The IEBEP is a series of workshop programmes to be conducted all over the country.
- In December 2003 a two-day workshop was conducted at Jaipur in collaboration with the Eye Bank Society of Rajasthan (EBSR), the government of Rajasthan, and the Eye Bank Association of India to promote eye banking and corneal transplantation services in Rajasthan. The focus was on promoting the activities of EBSR, development of an eye banking system across the state, training of eye bank professionals and corneal surgeons and passing of favourable laws by the government. The workshop was well attended by people from all walks of life.
- Under the ORBIS-ESI-LVPEI training programme a **Hospital Based Programme (HBP) for corneal surgeons** was organised at LVPEI. The faculty was renowned corneal surgeon Dr Roberta Pineda, Scholar at the Academy of the Harvard Medical School, Boston, USA. All the cornea and comprehensive faculty and fellows benefited from this hands-on workshop.
- As part of the ORBIS-ESI-LVPEI programme, the RIEB has developed educational material (manuals & videos) in eye banking procedures. Training has been imparted to 15 ophthalmologists, 5 eye bank managers, 8 eye donation counsellors, and 9 eye bank technicians between September 2003 and March 2004.
- The RIEB has initiated a **Organ Culture Research Laboratory facility** to carry out studies on better modalities of donor cornea preservation. Research has been initiated to enhance the pool of human donors under the project 'The Applicability of Organ Culture Technique for Meeting the Demand for Quality, Quantity and Safety of Donor Corneas for Transplantation.'
- The RIEB received a major grant from ORBIS International, USA, and Eye Sight International, Canada, for the project '**ORBIS-ESI-LVPEI International Training and Resource Center for Eye Banking and Cornea Fellowship**'. The objectives of the three-year project also include imparting training in eye banking techniques and corneal transplantation to eye bank technicians and ophthalmologists respectively, besides research work in organ culture.

## Jasti V Ramanamma Children's Eye Care Centre



### Congenital glaucoma

#### LVPEI keeps the stars in Swathi's eyes

Life could have been very different for 13-year-old Swathi, whose large beautiful eyes are full of starry dreams today. But she was fortunate that her family brought her to LVPEI at the first sign of eye trouble where she was seen by the country's leading doctors in congenital glaucoma.

Congenital or pediatric glaucoma refers to the symptoms of glaucoma occurring in a child; these are high intraocular pressure, damage to the optic nerve and vision loss. Increased pressure in the eye can lead to physical changes like enlargement of the eye, cloudiness of the cornea and damaged vision. A WHO report estimates that 130,000 children in India are blind as a result of congenital cataract.

Swathi was six months old when she first came to the Institute in January 1992 with complaints of persistent watering in her left eye. Her right eye was essentially normal, but both the eyes had an increased corneal diameter. The family members considered her large eyes to be a sign of beauty but she had slight difficulty in opening her eyes in daylight.

On examination under anaesthesia she was found to have a horizontal corneal diameter of 13.5 mm in the right eye and 14.5 mm in the left eye. The right eye cornea had normal clarity but the left eye could not be evaluated because of corneal edema and other complications.

Swathi was diagnosed to have primary congenital glaucoma and she underwent combined trabeculectomy

cum trabeculectomy in the left eye in January 1992. The surgery was successful and her case was regularly followed up. Her intraocular pressure was controlled without any medication.

By the time she was 13 her best spectacle corrected visual acuity was 20/20 and 20/30 in the right and left eye, respectively. She is now studying in class VIII and doing well. At her last routine check-up in 2004 she said she does not have any problems.

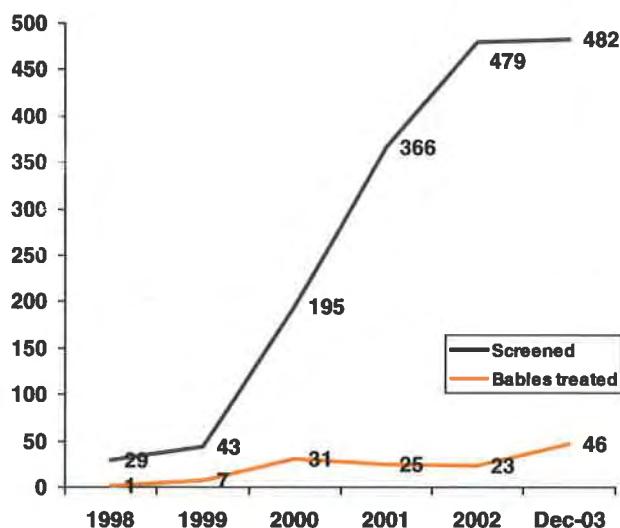
Swathi's family was keen on her competing for the Miss Universe pageant and she grew up dreaming of the crown. She says the pageant is not merely about beauty, brains too are essential to win. If she does achieve her goal, she would like to donate the entire winnings for the welfare of children afflicted with congenital glaucoma.

She is grateful to have escaped the life-long debilitating effects of a disease she doesn't understand too well, because it was detected early and treated. Besides the surgeons' skill her family too played a crucial role by bringing her to LVPEI regularly for follow-up visits.



## Retinopathy of Prematurity (ROP)

### Performance of ROP Services



### Screening programme for premature babies

In 1998 LVPEI launched a screening programme to identify ROP cases in partnership with the major Neonatal Intensive Care Units (NICUs) in Hyderabad. Now eight NICUs have joined this vision-saving initiative for pre-term babies and the number of babies referred directly to us is increasing. Since ROP is a serious issue, babies are seen at LVPEI at any time without appointment.

Using state-of-the-art diode lasers with portable machines treatment is given within 72 hours of detection. Surgery is done when laser treatment fails to help or, occasionally, for advanced cases. In the majority of cases, both eyes need to be treated. All babies treated for ROP are carefully followed up so that the children can enter school with the best possible visual status.

Our comprehensive management team includes a pediatric ophthalmologist, vision trainers, rehabilitation workers, opticians, contact lens specialists, ocularists, pediatric nurses, anesthesiologists and surgeons. The range of pediatric retinal disorders treated includes retinal detachments, familial exudative vitreoretinopathy, trauma including endophthalmitis and several primary retinal degeneration.

## Pediatric Cataract

### Early detection can save vision

Contrary to popular Indian belief, a baby born with a squint is not always a lucky child. Though squint per se can decrease vision, it can also be an indication of more serious disorders like a tumor or cataract. L V Prasad Eye Institute continues to see pediatric cataract cases that are referred from all over India. The number of cases seen last year was 411, while the earlier year we saw 456 cases. This underscores the need for early intervention in children born with sight threatening diseases.

Cataract is one of the leading causes of blindness among the 2,70,000 blind children in India. Pediatric cataract may be caused by hereditary factors such as a consanguineous marriage, or metabolic disorders or poor nutrition. Eye injury or maternal infections during pregnancy, especially rubella, are other risk factors.

Childhood cataract must be treated with utmost urgency, even a few months' delay could mean a drastic and life-long reduction in vision or lead to the development of amblyopia or a 'lazy eye'. At LVPEI doctors routinely examine children with/without anesthesia to detect any abnormalities as early as possible. Recently 40 children from a residential school for the blind from Bobbili, a small town in Andhra Pradesh, were brought to the Institute after a visiting ophthalmologist discovered that they had some residual vision. Some of them were operated upon and, with visual aids, they are now able to see enough to be mobile. Most of these children were blind or severely visually impaired due to cataract formation at birth.

One out of every 1,000 children is blind for the combined rural and urban population of Andhra Pradesh. Although the rate of blindness among children is lower than that in old people, their average life expectancy is about eight times higher than that of the elderly; which means that their years of blindness and consequent socioeconomic burden of blindness is far more considerable. Blindness due to cataract in children accounts for 10% cases; this can be avoided if adequate facilities for detection, surgery and subsequent follow-up are available.

## VST Centre for Glaucoma

### Newer imaging techniques for early glaucoma diagnosis

Glaucoma, a leading cause of irreversible blindness in the world, consists of a group of disorders where there is progressive damage to the optic nerve, caused by various risk factors including increased pressure in the eye. Since the damage due to glaucoma is largely irreversible, early detection and prevention is of vital importance. In fact, early diagnosis and timely intervention can reduce the incidence of blindness associated with glaucoma.

Glaucoma is traditionally diagnosed on the basis of intraocular pressure, evaluation of the Optic Nerve Head (ONH), the Retinal Nerve Fiber Layer and the visual field. The ONH is part of the optic nerve that is present in the eye and is amenable to examination and imaging. The optic nerve carries information from the eye to the brain in the form of images, which are then analyzed by the brain. Evaluation of the ONH, the retinal nerves and visual field assessment is essential in both detecting and monitoring glaucoma. Damage to the nerves and optic disc has been shown to precede field defects by as much as five years. Stereoscopic optic disc photographs examined by an experienced observer are crucial in the clinical examination. However, difficulty in obtaining good images and availability of an expert evaluator are some limitations.

New imaging technologies for glaucoma allow physicians an objective, reproducible, and more user-friendly approach to documenting structural damage to the optic nerve head and Retinal Nerve Fiber Layer (RNFL). These techniques are fast and the digital information collected can be stored and retrieved for future assessment. This is particularly important because, in the majority of glaucoma patients, structural damage occurs before standard visual field loss. These devices help ophthalmologists in early diagnosis, while also helping to evaluate the progression of the disease and monitoring the treatment.

Optical Coherence Tomography (OCT), Heidelberg Retinal Tomogram (HRT), and NFL polarimetry (GDx) are relatively new diagnostic techniques for performing an objective assessment of the various structures of the retina. They are non-invasive, non-contact imaging devices that use lasers to scan the retina.

The **Heidelberg Retinal Tomogram (HRT II)** is an imaging tool that calculates the three-dimensional surface topography of the optic disc region. This calculation is based on a series of images obtained using a laser, while the

software in the HRT II provides the user with several quantitative parameters of the ONH. Inbuilt diagnostic indices help the clinician in the diagnosis of glaucoma.



**Optical Coherence Tomography (OCT)** is a recent diagnostic imaging technique that can perform very high resolution (up to 10 microns) cross-sectional imaging of the RNFL, ONH and the macular area of the retina. Data obtained from the patient is compared with that of the normal population to assist in diagnosis.

In **Scanning Laser Polarimetry (GDx)** the laser beam is passed through the RNFL twice; the software provides numerical values of the thickness of the layer, which can help predict the likelihood of the patient having glaucoma.

The **VST Center for Glaucoma Care at the L V Prasad Eye Institute** uses these three imaging devices. Studies have shown that racial variations exist in the optic nerve head size and shape. All the devices currently use data collected from Caucasian patients, both normal and those affected by glaucoma. We are now collecting data from normal subjects, so that it can be incorporated for better comparison and diagnosis in Indian patients.

These devices cannot replace visual field testing but can complement it for the comprehensive monitoring of glaucoma patients. Currently, reports from these technologies by themselves do not change management plans for patients; but in future they may help us decide which patient's glaucoma is getting worse.

## Smt Kanuri Santhamma Retina Vitreous Centre

### Timely detection of post-surgical infections

**Endophthalmitis is a rare but devastating complication of cataract surgery. Delay in diagnosis and management can lead to blindness, but prompt diagnosis and early treatment can salvage useful vision as in this case.**

L V Prasad Eye Institute treats a large number of post-cataract surgery infection cases, known as endophthalmitis, that are referred from all over India. Endophthalmitis is a potentially sight-threatening disorder requiring prompt and emergency treatment. It usually occurs after intraocular surgeries or, rarely, due to infections elsewhere in the body.

Endophthalmitis occurs after cataract surgery in 0.1% to 0.3% of cases and calls for specialized care by vitreoretinal surgeons to manage this otherwise blinding disorder. LVPEI's surgeons have the skill and expertise to effectively deal with the disease. The number of endophthalmitis cases reported at LVPEI from April 2003 - March 2004 was 416.

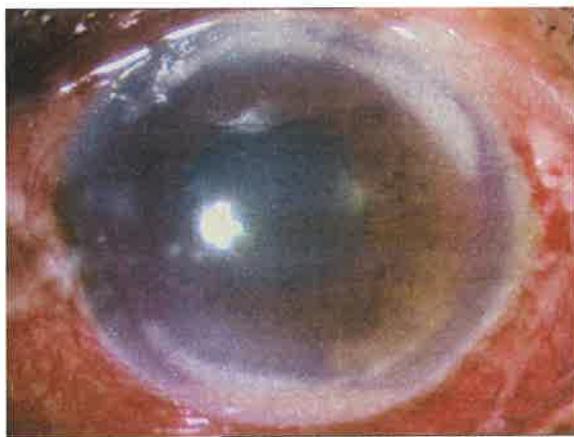
A 60-year-old gentleman had a cataract surgery with an intraocular lens implantation in his left eye at an eye hospital in peripheral Andhra Pradesh. He enjoyed good vision for four days. On the fifth day he found that his vision had become blurred and the redness in his eye had increased. He continued with the prescribed drops, hoping that the situation would improve. However, on the sixth day he woke up with severe discomfort in his left eye. "The

eyelids were swollen, the redness had increased markedly and my eye was watering," he recalled. His vision had become cloudy. His ophthalmologist diagnosed him with post-operative endophthalmitis and referred him to LVPEI.

The patient arrived at LVPEI the same evening and was seen by the retina consultant on an emergency basis. His vision had reduced to mere perception of light. The eye was red and had a thick membrane covering the pupil. The front portion of the eye (the anterior chamber) had pus obscuring the view of the posterior part of the eye, the retina. An ultrasound scan was done to check the status of the retina.

The patient was apprised of his condition and advised surgery for clearing the infection, along with injection of antibiotics into the eye. The surgery was performed under local anesthesia. The infected material was sent for microbiological testing. Post-operatively he was on medication.

The next day the patient was feeling more comfortable, his vision had improved marginally. The microbiological report confirmed that he had endophthalmitis and he was advised to continue putting eye drops as well as take oral medication. His vision improved steadily over the next few weeks and he regained 90% of his normal vision after six weeks.



Endophthalmitis prior to intervention



The eye after treatment

## Ophthalmic Plastic Surgery, Orbit and Ocular Oncology

### Children's Eye Cancer Centre - A new Dimension to Children's Eye Care

Cancer is the second leading cause of death in children under 14 years of age. Cancers of the eye and related structures, if untreated, lead to certain death. About 20 - 30% of cancers of the eye and related structures occur in the pediatric age group. The tumors are diverse, ranging from retinoblastoma, the commonest primary intraocular malignant tumor in children, to rhabdomyosarcoma, the commonest malignant primary orbital tumor.

Until recently, many of the tumors were generally considered to be relatively resistant to treatment. Several recent refinements related to the diagnosis and management of these lesions, however, have been quite encouraging. A few decades ago, retinoblastoma was considered to be uniformly fatal, while the current management strategy is able to save life in over 95% of children and salvage the eye and the vision as well.

About 1000 children are diagnosed with retinoblastoma each year in India, most of them under four years of age. About 75% of children with retinoblastoma have a tumor in one eye, while in the remaining 25%, both eyes are affected. Retinoblastoma accounts for 5% of childhood blindness.

If detected early, cure is possible with appropriate treatment. Useful vision is maintained after treatment in 85% of affected eyes. The following series of pictures illustrates the role of chemoreduction coupled with sequential aggressive local therapy in the management of retinoblastoma. This multidisciplinary approach results in eye salvage in about 85% of patients with an excellent potential for residual vision.



Advanced orbital tumors that had a mortality of over 70% can now be cured in a majority of patients with the current protocol combining chemoreduction with surgery and radiotherapy. Here is one such child, before and after treatment.



#### Ocular Oncology Centre at LV Prasad Eye Institute

The first and the only Ocular Oncology Centre in India was established at the LV Prasad Eye Institute, Hyderabad in the year 2000. At this centre, we have diagnosed and comprehensively managed 1500 patients with eye cancers, 20% of whom are children. Management of eye cancers in children warrants a much specialized team approach as compared to adults.

On January 24, 2004, the Sight Savers International funded Children's Eye Cancer Centre was inaugurated by international authorities in pediatric cancer: Alfred Knudson, Anna Meadows, Carol Shields, and Jerry Shields. The Children's Eye Cancer Centre addresses management needs of children affected by the cancers of the eye and related structures. It is a tertiary care referral centre and will actively seek referrals from across the country.

## Gold Implants in Eyelids for Facial Paralysis



Figures 1 & 2



Figure 3



Figure 4

The facial nerves help the muscles of the face to close the eyes as well as facilitate facial expressions. If this nerve becomes paralyzed due to injury or brain surgery, the eye cannot be completely closed (Figure 1 & 2). Besides being a cosmetic disfigurement, this also poses a threat to the cornea, and can reduce the patient's vision.

Now this defect can be corrected by placing a small specially designed gold weight within the patient's upper eyelid. The weight is fixed to the eyelid structures below the skin and is not visible. A trial set (Figure 3) is used to determine the appropriate weight for each individual before performing the actual surgery to achieve the best results. Once surgery is over the weight acts by gravity, closing the eyelid during relaxation (Figure 4). This not only protects the cornea but also makes the face appear normal.

This eyelid gold weight implantation procedure has been operational in LV Prasad Eye Institute since November 2003; we have treated over 15 patients successfully till date.

## The importance of looking normal

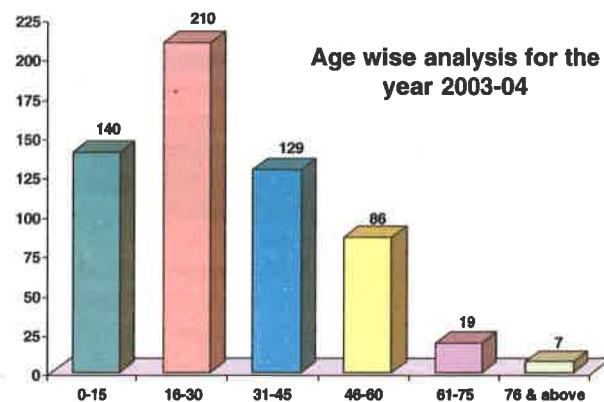
The loss of an eye is perceived as a social stigma; not only does it mar a person's physical appearance but also leaves lasting scars on his/her emotional state. However, many of the psychological implications can be minimized if the person is fortunate enough to be fitted with a natural looking eye, with realistic eye movements.

When young Hritik Singh from Assam came to LVPEI in January 2004 with only one eye he was emotionally bruised from the teasing and taunting of his peer group and relatives. Born in a middle class family, he was only three weeks old when it was discovered that he had no vision in that eye and it had to be removed. The parents hoped that technological advances may one day enable their child to see again. So they left the eye intact, but it was visibly disfigured.

After running around several hospitals his parents finally came to LVPEI. At the Ocular Prosthesis Services they were told that a normal looking eye could be fitted on to Hritik's existing eye. The child underwent a check-up and was fitted with a prosthetic eye. Hritik was very pleased with his appearance, leaving the Institute confidently saying, "I am also looking normal, nobody can tease me now".

The Ocular Prosthesis Services at LVPEI was set up in April 2002. It is integrated with the ophthalmic plastic surgery

division and is now rapidly growing as a referral centre for management of patients in whom the eyeball is removed (eviscerated, enucleated sockets and phthisical eyes). Most of these problems are treated cosmetically with custom-made ocular prosthesis or artificial eyes. The range of services offered includes custom-made prosthesis shells, artificial eyes, ptosis crutch, orbital prosthesis (facial prosthesis) as also corneal shields, iris painted conformers, universal conformers, etc. The centre's patient base comprises patients of all the ages, ranging from few weeks' old babies to a 97-year-old patient.



# Vision Rehabilitation Centres

Meera & L B Deshpande Centre for Sight Enhancement

Dr. P R K Prasad Centre for Rehabilitation of Blind & Visually Impaired

This was an eventful year; the centre made a significant addition to its facilities with the setting up of an IT resource centre for the blind and visually handicapped. The resource centre was made possible through the generous support of our long-time friends and supporters based in the US, the Deshpandes and the Gottipallis. The centre is equipped with a computer with screen reading software to provide the visually handicapped access to information regarding educational and employment opportunities.

The centre has developed teaching learning materials for special educators to assist children with low vision. This effort was supported by Dr. Richard Charles and Esther Yewpick Lee through the International Council for Education of children with Visual Impairment (ICEVI), West Asia.

The other notable achievements of the year included low vision specialist Vijaya Kumari's receiving the Freda Bage scholarship for pursuing her Ph D from the Queensland University of Technology, Brisbane, Australia.

In training the highlight was the participation in our low vision programme by international eye care professionals from Malaysia, Indonesia and Nepal.

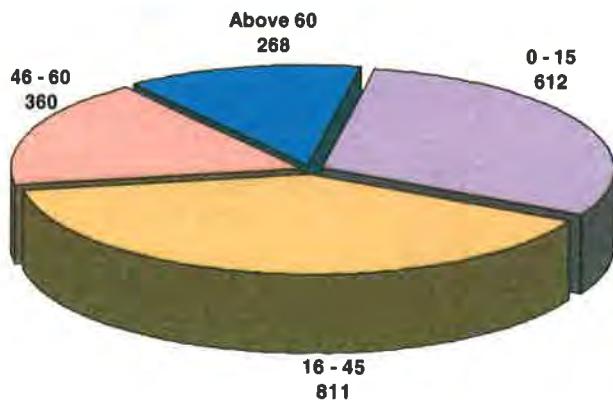
## Low vision care during the year

Fresh patients	2051
Follow-up patients	699
Total patients	2750

## Optical devices prescribed

Spectacles	422
Bifocals	192
Magnifiers	589
Telescopes	189

## Age-wise analysis of patients



## Non-optical devices prescribed

Reading stand	59
Reading lamp	125
Typoscope	29
Approach magnification	1678
Light control devices	187
Closed-circuit television	35

## Rehabilitation services for children

Fresh cases	869
Follow-up cases	581
Total	1450

## Rehabilitation services for adults

Fresh cases	2045
Follow-up cases	388
Total	2433

## **Events: Public awareness programmes, workshops & projects**

### **Public awareness programmes**

Our Vision Rehabilitation Centres participated in the 'Access 2003' National Exhibition on Assistive Devices, Barrier free features, and Teaching learning materials at Hyderabad between July 21-26, 2003.

**World Sight Day** was commemorated as part of the VISION 2020: The Right to Sight initiative on October 8 - 9, 2003, in collaboration with AP Rights to Sight Society and the Rotary Club of Hyderabad. The highlights of the event included exhibitions of posters to create awareness about eye diseases, distribution of leaflets giving information about visual impairment, display of low vision devices and rehabilitation and training material. Around 1200 schoolchildren visited the exhibition, in addition to a large number of adults.

### **LEE Foundation Project**

'Development of Teaching Learning Materials for teachers to assist children', a project supported by the LEE foundation through ICEVI was inaugurated on July 22, 2003. On February 28, 2004, an orientation workshop was organized for teachers to familiarize them with the material. The 75 participants included 30 teachers.

### **Camp for Fun**

A camp for visually impaired children was organized on December 27, 2003, at Jalagam Vengal Rao Park, Hyderabad. The 84 participants included 29 visually impaired children, along with their parents and siblings. Games were conducted for the children such as sack race, balloon bursting, sand games, book balancing, tug of war, rolling the ball and adventure games.

### **Audio cassettes launched**

The VRC launched a series of audio cassettes with stories in Telugu for visually impaired children.

### **Resource Centre for Information Technology**

Mr and Mrs Sanjay Deshpande and Mr and Mrs Praveen K Gottipalli, NRI couples based in USA, have pledged their support for the development of an IT resource centre for the visually impaired. The centre will have software technology solutions that will enable the visually impaired to use computers to access information regarding education and employment. The centre will have four work stations with all the latest assistive software as also a Braille printer.

### **Low Vision Training Programmes**

The one year long-term fellowship programme is supported by Eye Sight International, Canada, and the short-term programme (3 months) is being supported by Sir Ratan Tata Trust, Mumbai.

- An MoU was signed with the Tun Hussain Onn National Eye Hospital and the Malaysian Association for the Blind, Kuala Lumpur, to provide training to eye care

professionals and help set up low vision services in Malaysia.

- The Centre continues to receive support from the Gottipalli family for providing vision enhancement devices to economically underprivileged visually impaired children.
- The Centre also received a grant from SMEC Foundation, Australia, to provide 4X monocular telescopes to underprivileged children.
- Mr Dilip Kumar Gir from USA made a donation to support the provision of visual and multi-sensory stimulation materials for early intervention in young children with visual impairment.
- Sight Savers International, Mumbai, has funded 50 low vision assessment kits for eye care professionals undergoing low vision training at LVPEI, Hyderabad.

### **Community Based Rehabilitation**

The VRC team with assistance from ADD, India, conducted meetings with self-help groups in slum areas in and around Hyderabad. These groups comprised people with multiple disabilities, their families and volunteers from among the community. The self-help groups meet regularly to discuss issues such as the vocational rehabilitation needs of disabled people, income generation and savings measures, provisions of the Disability Act and the facilities available for disabled persons. The areas covered were Chacha Nehru Nagar, Bandamaisamma Nagar, Mugubasti, and Kavadiguda. Five disabled children from Mugubasti and Chacha Nehru Nagar were assisted in getting educational sponsorship from Kapila Maharishi Research for Resources.

Public meetings were also held at Chacha Nehru Nagar where information was shared with the community through songs and street plays. A medical screening camp was conducted at Chacha Nehru Nagar where 329 people underwent screening. Orientation programmes for teachers were conducted at Sri Sai Vidya School, Chacha Nehru Nagar, and English Union High School, Kavadiguda, where information was imparted on the implication of disabilities, the needs of disabled children and the crucial role played by teachers.

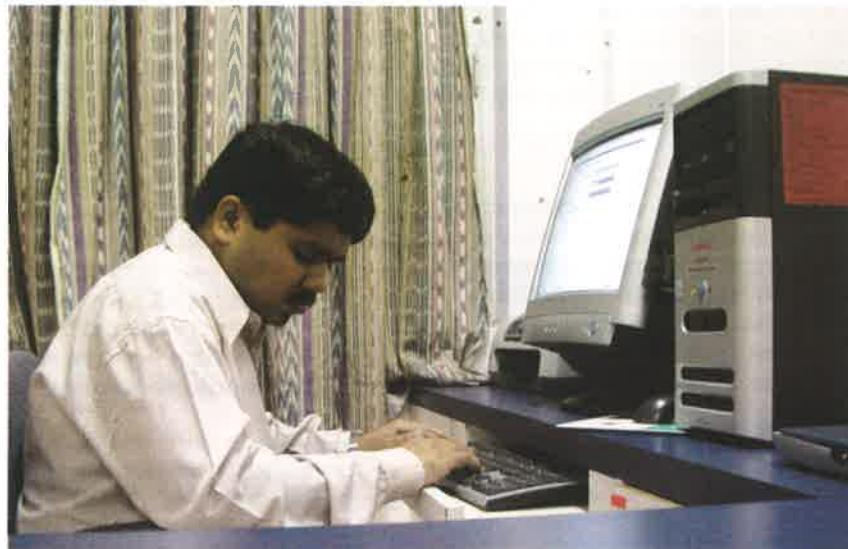
The Centre also conducted a state level network meet for CBR Forum partners at the Bausch & Lomb School of Optometry at Kismatpur, with 15 NGOs participating in discussions on networking and sharing of resources. They also discussed the state level implementation plan on disability management.

Refresher training programmes for community workers were conducted regularly during the year. Community workers visited the community based rehabilitation project of ADD, India, at Jadcherla, Mahabubnagar, and Kosagi to understand the functioning of self-help groups.

## A rehabilitation patient leads the way

He calls himself a friend of LVPEI and indeed he is. Bibu is an inspiration for others in the way he has courageously faced up to the challenges thrown by his blindness to become an independent, confident person. Technology savvy, he has mastered the different software available for the blind and is now a resource person for LVPEI for familiarising others with it.

G Bibu became blind when he was two, it was another blow for his parents who had two blind daughters, one of them also mentally handicapped. The blindness is due to a hereditary condition retinitis pigmentosa, caused by the parents' consanguineous marriage. Bibu and his sister Sindhu went to integrated schools and received a regular education. Using audio cassettes for recording and a scribe for writing exams Bibu studied law and joined a typewriting institute to learn keyboard operations and later on purchased a personal computer.



Bibu and Sindhu have been coming to LVPEI's Rehabilitation Centre for the past several years. Here they learnt daily living skills, including mobility and home management. They continue to come for transcribing their study and reading material on to audio-tapes. Married to a sighted person and looking forward to having a happy family, Bibu works in the government Roads and Buildings Department.

LVPEI's Rehabilitation Centre has recently set up an **IT Resource Centre**, equipped with Kurzweil 1000, Jaws and MAGic - all assistive technology for the blind. A Braille printer has also been installed. Bibu has become an asset for the Institute's IT Centre. With the help of a friend Bibu had learnt to use Kurzweil 1000, a voice-enabled, user-friendly software that scans documents in the edit mode, allowing users to make changes in the documents. He is also well-versed with Jaws, a screen reading software that operates on the Windows platform. So well-versed is he with the software that Bibu is now helping other patients and staff members to learn Kurzweil and Jaws. Beula Christy, our rehabilitation expert, says, "We are learning from him, he is teaching us the keys and various commands".

Bibu's self-confidence and achievements have made him a role model for other visually handicapped persons and the Rehabilitation Centre continually refers new patients to him for counselling and support.

## Education Centre



**Trainees came from all over India and various parts of the world**

- Australia ● Bangladesh ● Canada ● Dominican Republic ● East Timor ● Germany ● Ghana ● India
- Indonesia ● Kenya ● Malaysia ● Myanmar ● Nepal ● Saudi Arabia ● South Africa ● Sri Lanka ● USA

The Education Centre completed another eventful and satisfying year, with an increase in the number of trainees at LVPEI, who come here from all over the world. Four teams comprising an ophthalmologist, anesthetist and an ophthalmic nurse from Ghana, Kenya, Sri Lanka and Chitrakoot in India came for the WHO-IAPB sponsored pediatric ophthalmology programme.

Over 45 eye care professionals have come to the Institute as observers last year; the interest in the LVP Zeiss diagnostic programme has been increasing with young ophthalmologists coming here from different medical colleges.

The Bausch & Lomb School of Optometry completed another fulfilling year in 2003 - 2004. Admissions for the academic session 2003 - 2004 were advertised by the Birla Institute of Technology & Science, Pilani, in the national media. The response was encouraging and a fresh batch of students was admitted into the various school programmes. The scholastic aptitude of the students was found to be very good, which was heartening, considering the need for dedicated quality eye care professionals in the country.

At the beginning of the new academic year Prof Coen G A de Jong was appointed principal of the Bausch & Lomb School of Optometry. He was earlier Director of Bartemeus of the Netherlands, a pioneering rehabilitation organisation.

All through the year students of the school participated in the community eye screening programmes conducted by ICARE in and around Hyderabad. Some of them also participated in the World Sight Day exhibition and screening programme held at the Jawahar Bal Bhavan (a children's center) at Hyderabad.

For the first time interns and third year students participated in the 7th All India Optometric Conference at Kolkata. They were Nisha Singh, M Vinod Kumar, and A Baskar. Another first was the participation by the internees in the third Dr E Vaithilingam Memorial Scientific Session at Sankara Netralaya, Chennai. The internees were Ajay Kumar, Archana Srinivas, Prasad Reddy, Manjula, Venkatesh Goud, and Nisha Singh. Archana Srinivas was given the first Best Presentee Award, while Prasad Reddy received the second award for outstanding presentation.

# Ophthalmology

## Cornea & Anterior Segment

Dr Jayangshu Sengupta	Kolkata, West Bengal	15 months	Long-term
Dr Jayeeta Bose	Kolkata, West Bengal	15 months	Long-term
Dr Meeta R Birla	Mumbai, Maharashtra	15 months	Long-term
Dr Deepshikha Agrawal	Raipur, Chattisgarh	15 months	Long-term
Dr Ritesh Kakrania	Bhopal, Madhya Pradesh	15 months	Long-term
Dr Sudhakar Potti	Guntur, Andhra Pradesh	15 months	Long-term
Dr Udo Duerksen	Dominican Republic	15 months	Long-term
Dr Murali Krishna	Kakinada, Andhra Pradesh	15 months	Long-term
Dr Shafeeulla Thamboli	Lucknow, Uttar Pradesh	3 months	Short-term
Dr Pratibha Surender	Chennai, Tamilnadu	3 months	Short-term
Dr Vishnu Swarup Gupta	New Delhi	3 months	Short-term
Dr Shilpa A Joshi	Pune, Maharashtra	3 months	Short-term
Dr Susmita Nag Choudhury	Kolkata, West Bengal	3 months	Short-term

## Glaucoma

Dr Piyush Jansari	Jamnagar, Rajasthan	15 months	Long-term
Dr Dhanaraj Rao A S	Mysore, Karnataka	15 months	Long-term
Dr Venkata Ratnam	Hyderabad, Andhra Pradesh	15 months	Long-term
Dr Srinivas Sastry	Hyderabad, Andhra Pradesh	3 months	Short-term
Dr Rayapudi Padma	Bangalore, Karnataka	3 months	Short-term
Dr N Naveena	Hyderabad, Andhra Pradesh	3 months	Short-term

## Retina Vitreous

Dr Gaurav Y Shah	Mumbai, Maharashtra	15 months	Long-term
Dr Saurabh Agrawal	Lucknow, Uttar Pradesh	15 months	Long-term
Dr Rajalingam V	Hyderabad, Andhra Pradesh	15 months	Long-term
Dr Lakshmi Kanta Mondal	Kolkata, West Bengal	3 months	Short-term
Dr Anuraag Bhargava	Lucknow, Uttar Pradesh	3 months	Short-term

## Retina Diplomate of the National Board

Dr Ashish Kumar Lall	Gurgaon, Haryana	2 years	Long-term
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## Comprehensive Ophthalmology

Dr Manohar Kumar M	Bellary, Karnataka	3 years	Long-term
Dr Vincent Michael	Latur, Maharashtra	3 years	Long-term
Dr Suresha K S	Davangere, Karnataka	3 years	Long-term
Dr Vijay Shetty	Brahmapuram, Karnataka	3 years	Long-term
Dr C Ravi	Rayachoti, Andhra Pradesh	3 years	Long-term

## Pediatric Ophthalmology

(WHO, IAPB, VISION 2020 Programme)

Dr Stephen Akafo	Team from	3 months	Short-term
Dr Eric Fordjuor	Korle-Bu Teaching Hospital,	3 months	Short-term
Ms Agnes Arthur Netty	Ghana	3 months	Short-term
Dr Vera Adoebea Essuman		1 year	Long-term

Dr Dunera Ilako		3 months	Short-term
Dr Thomas Chowkwe Muinga	Team from	3 months	Short-term
Ms Anne Ndindi Mutuku	Kenyatta National Hospital,	3 months	Short-term
Dr Margaret Njuguna	Kenya	1 year	Long-term
Dr C M M Pasqual		3 months	Short-term
Dr N P A U M Mangalika	Team from	3 months	Short-term
Dr R M U J Rathnayake	General Hospital, Nagoda,	3 months	Short-term
Ms Kalyani Galaboda	Kalutara, Sri Lanka	3 months	Short-term
Dr Santosh Devidas Dalankar		3 months	Short-term
Dr Bharati Santosh Dalankar	Team from	3 months	Short-term
Mr Vikas Tamrakar	Sadguru Netra Chikitsalaya,	3 months	Short-term
Dr Shailendar Rajput	Chitrakoot, Madhya Pradesh	1 year	Long-term
Dr Tin Maung Soe	Yangon, Myanmar	1 year	Long-term

#### **Ophthalmic Plastic Surgery**

Dr Raman Mittal	New Delhi	15 months	Long-term
Dr Ani Sreedhar	Angamally, Kerala	3 months	Short-term
Dr Ramesh Murthy	Pune, Maharashtra	15 months	Long-term

#### **Microsurgery (ECCE & IOL Implant - 2 months)**

Dr Ali Zaheer Rizvi	Barabanki, Uttar Pradesh
Dr Davinder Kumar	Jind, Haryana
Dr Markus Schulze Schwering	Tubegen, Germany
Dr Nupur Roy	Kolkata, West Bengal
Dr L Ramachandra Murthy	Hyderabad, Andhra Pradesh

#### **Retina Laser (1 month)**

Dr Uma Venugopal	Hyderabad, Andhra Pradesh
Dr Vivek Sah	Lucknow, Uttar Pradesh
Dr Neelima Mehrotra	Bareilly, Uttar Pradesh
Dr B Akbar Altaf	Anantapur, Andhra Pradesh
Dr Swati Sharma	Bhopal, Madhya Pradesh
Dr Parveen Kulsoom Zaidi	Hyderabad, Andhra Pradesh
Dr R K Chaurasia	Lucknow, Uttar Pradesh
Dr Sanjeev Mittal	Dehradun, Uttarakhand
Dr Lata Misra Bajpai	Mumbai, Maharashtra
Dr Jyothi Bhende	Mumbai, Maharashtra
Dr Anushka Sharma	Mumbai, Maharashtra
Dr Altaf Husain Khan	Nanded, Maharashtra

#### **Phacoemulsification (1 month)**

Dr Rachna Pandey	Hyderabad, Andhra Pradesh
Dr Nawab Farooqui	New Delhi
Dr Vijay Kumar Jain	Guwahati, Assam
Dr R K Naiyer	Lucknow, Uttar Pradesh
Dr Sreekantiah Geetamani	Hubli, Karnataka
Dr Sanjiv Kumar Garg	Meerut, Uttar Pradesh
Dr V K Agrawal	Varanasi, Uttar Pradesh
Dr Mohd. Athar	Lucknow, Uttar Pradesh
Dr Bajantri Yallappa	Hubli, Karnataka
Dr Venkata Gowda H	Mysore, Karnataka
Dr Ravi Lakkineni	Hyderabad, Andhra Pradesh
Dr Ramesh B H	Hassan, Karnataka
Dr Krishna Pal Bata	Agartala, Tripura



Dr V Ramana Raju  
Dr Ila Singhal  
Dr G Sudhakar Reddy

Bhimavaram, Andhra Pradesh  
Pantnagar, Uttarakhand  
Hyderabad, Andhra Pradesh

#### **Manual Small Incision Cataract Surgery (MSICS - 2 months)**

Dr Ashok Monga  
Dr B Srikanth  
Dr Modini  
Dr Chinmoyee Deka  
Dr Kavita Patil  
Dr Veena Patil  
Dr Surabhi Mehra

Bhilwara, Rajasthan  
Kurnool, Andhra Pradesh  
Hyderabad, Andhra Pradesh  
Dimapur, Nagaland  
Gulbarga, Karnataka  
Gorakhpur, Uttar Pradesh  
Chandrapur, Madhya Pradesh

#### **LVP - Zeiss Academy: Course in Ophthalmic Diagnostics (1 month)**

Dr Anirban Das  
Dr Soham Sarkar  
Dr G Aruna Kumari  
Dr R Himabindu  
Dr Jagruti N Jadeja  
Dr Anil Choudhary  
Dr A Rama Krishna  
Dr Ch Srinivas Reddy  
Dr Chinmoyee Deka Datta  
Dr Rupa Jain  
Dr Mital Patel  
Dr N V R Murthy  
Dr D Y Jagan Mohan  
Dr Veena Patil  
Dr Mona Bhargava  
Dr Abhishek Chandra  
Dr Vijaya Bhaskar Reddy Aetigadda  
Dr Dev Kunj Chauhan  
Dr Sudha Sundaram  
Dr Anuradha  
Dr Praveen Chandra  
Dr Lokesh D  
Dr Jalal Ahmed  
Dr R K Bhandari  
Dr Abdul Aziz Makayee  
Dr Pragati Tikoo  
Dr Rohina Swaroop  
Dr Aparna Darswal  
Dr Manpreet Kour  
Dr Reema Sadhu  
Dr Deepak Paddita  
Dr P Rajani  
Dr P Devika  
Dr P Sasidhar  
Dr M V Ramanakishore  
Dr P Ravi Kiran  
Dr K S Kareemuddin  
Dr K H P T N De Silva  
Dr R S Vinay Kumar  
Dr Chandana Rani Ojha  
Dr Gayatri Kanungo  
Dr Devjyoti Tripathy  
Dr Saubhagini Sahoo

Behrampur, Orissa  
Behrampur, Orissa  
Visakhapatnam, Andhra Pradesh  
Visakhapatnam, Andhra Pradesh  
Ahmedabad, Gujarat  
New Delhi  
Visakhapatnam, Andhra Pradesh  
Visakhapatnam, Andhra Pradesh  
Dimapur, Nagaland  
Vadodara, Gujarat  
Vadodara, Gujarat  
Guntur, Andhra Pradesh  
Guntur, Andhra Pradesh  
Gorakhpur, Uttar Pradesh  
Varanasi, Uttar Pradesh  
Varanasi, Uttar Pradesh  
Varanasi, Uttar Pradesh  
Jamnagar, Gujarat  
Bangalore, Karnataka  
Bangalore, Karnataka  
Hubli, Karnataka  
Hubli, Karnataka  
Khulna, Bangladesh  
Neemuch, Kerala  
Jammu Tawi, Jammu & Kashmir  
Tirupathi, Andhra Pradesh  
Tirupathi, Andhra Pradesh  
Tirupathi, Andhra Pradesh  
Tirupathi, Andhra Pradesh  
Kurnool, Andhra Pradesh  
Kurnool, Andhra Pradesh  
Colombo, Sri Lanka  
Chidambaram, Tamil Nadu  
Burla, Orissa  
Burla, Orissa  
Cuttack, Orissa  
Cuttack, Orissa

Dr Amandeep Singh  
 Dr K Venkatram  
 Dr Shivayogi R Kusagur

Hubli, Karnataka  
 Hubli, Karnataka  
 Davangere, Karnataka

#### **LVP - Zeiss Academy: Course in Ophthalmic Diagnostics (Advanced Course - 15 days)**

Dr Amar Desai	Valsad, Maharashtra
Dr Raghuraman	Chennai, Tamilnadu
Dr V Pratibha	Chennai, Tamilnadu
Dr V S Prem Kumar	Chennai, Tamilnadu
Dr Santosh Kumar	Jeddah, Saudi Arabia

#### **Observership programme**

Dr Rabbani Begum	Nellore, Andhra Pradesh	1 week
Dr Ambarish Toshniwal	Beed, Maharashtra	1 week
Dr Sushma Samel	Badlapur, Uttar Pradesh	1 week
Dr Aratee Palsule	Pune, Maharashtra	1 week
Dr Wahed	Dhaka, Bangladesh	1 week
Dr Sirisha Senthil	Vijayawada, Andhra Pradesh	1 week
Dr Parul M Sharma	New Delhi	1 week
Dr Rahul Navalkar	Mumbai, Maharashtra	1 week
Dr Yogesh Chhaparia	Gorakhpur, Uttar Pradesh	1 week
Dr Preksha Shah	Ahmedabad, Gujarat	1 week
Dr Suneeta Dubey	New Delhi	1 week
Ms Purvi Shah	Mumbai, Maharashtra	1 week
Dr Ajay Tammewar	Aurangabad, Maharashtra	1 week
Dr Sirish Thorat	Akola, Maharashtra	1 week
Dr Lipika Roy	Hyderabad, Andhra Pradesh	1 week
Mr Miral Shah	Mumbai, Maharashtra	1 week
Dr Ravi Lakkineni	Hyderabad, Andhra Pradesh	1 week
Dr Shailaja S	Mysore, Karnataka	1 week
Mr Nijesh Shah	Mumbai, Maharashtra	1 week
Dr Saman Adil	New Delhi	1 week
Dr J Sreedhar Babu	Hyderabad, Andhra Pradesh	1 week
Dr Saily Mishra	Allahabad, Uttar Pradesh	1 week
Dr Hitesh Bafna	Mumbai, Maharashtra	1 week
Dr Nirmala Sarpotdar	Pune, Maharashtra	1 week
Dr R Ramesh	Tiruchirapalli, Kerala	1 week
Dr R Meenakumari	Tiruchirapalli, Kerala	1 week
Dr Falguni S Mehta	Navsari, Gujarat	1 week
Dr S P Chakraborti	Titilagarh, Orissa	1 week
Dr M Chakraborti	Titilagarh, Orissa	1 week
Dr Balaji	Chennai, Tamil Nadu	1 week
Dr Jesse Chew	Vancouver, Canada	2 weeks
Mr Ben Prozesky	Pretoria, South Africa	1 month
Ms Prathima Neerukonda	Chicago, USA	2 weeks
Dr Shilpa Joshi	Pune, Maharashtra	1 week
Dr Vidya	Allahabad, Uttar Pradesh	1 week
Dr Rajeev Ramachandran	Philadelphia, USA	1 week
Dr Kiran Sajja	Ohio, USA	1 month
Dr Rupande Patel	Ahmedabad, Gujarat	1 week
Ms Namrata Kansara	Surat, Gujarat	1 day
Dr Ruby Gupta	Hyderabad, Andhra Pradesh	2 weeks
Mr Ajay Kumar Bootra	Kolkata, West Bengal	1 week
Ms Zainab Khambarty	Mumbai, Maharashtra	1 month
Dr A S Karthikeyan	Chennai, Tamil Nadu	1 week
Mr Amit Gupta	Badauni, Uttar Pradesh	1 week
Dr Atul Seth	Nerul, Maharashtra	1 week
Ms E Swapna	Hyderabad, Andhra Pradesh	1 month

# **Optometry**

## **Optometry Fellowship**

Ms Prachi V Sangle	Mumbai, Maharashtra	2 years
Mr G Ravi Kumar	Hyderabad, Andhra Pradesh	2 years
Mr Rajesh Kumar	Hyderabad, Andhra Pradesh	2 years

## **Bachelor of Science in Optometry (4 year programme)**

Ms Aditi Desai	Mumbai, Maharashtra
Ms Amrutha Valli	Kurnool, Andhra Pradesh
Mr Anand Singh	Jallandhar, Punjab
Ms Arifa Begum	Secunderabad, Andhra Pradesh
Mr Hari Krishna	Hyderabad, Andhra Pradesh
Ms Kalika Bhadamwar	Nanded, Maharashtra
Ms Krupa Philip	Kochi, Kerala
Mr Kulbhushan Sachdev	Ghaziabad, Uttar Pradesh
Ms G Laxmi	Khammam, Andhra Pradesh
Mr S P V R Naresh	Khammam, Andhra Pradesh
Ms Prachi Lathkar	Nanded, Maharashtra
Ms Sen Paulomi Ashoke	Hyderabad, Andhra Pradesh
Ms Sneha Kataria	Mumbai, Maharashtra
Mr Sumanth	Hyderabad, Andhra Pradesh
Mr Sumit Kumar	Barmer, Rajasthan
Ms Sushma	Hyderabad, Andhra Pradesh
Ms Swathi	Hyderabad, Andhra Pradesh
Ms Swathi Lakshmi	Hyderabad, Andhra Pradesh
Ms Swetha	Karimnagar, Andhra Pradesh
Mr Vardaan Sood	Solan, Himachal Pradesh

## **Preceptorship**

Ms Louella Varney	Sydney, Australia	1 month
Mr Stian Johansen	Sydney, Australia	1 month
Mr Emmanuel Arehia	Sydney, Australia	1 month

## **Diploma in Optometry (2 year programme)**

(At B&L School of Optometry)

Ms Akila	Secunderabad, Andhra Pradesh
Ms Anjuman	Hyderabad, Andhra Pradesh
Mr Bharat Kumar	Nalgonda, Andhra Pradesh
Ms Kiranmayi	Prakasam, Andhra Pradesh
Ms Lavanya	Hyderabad, Andhra Pradesh
Mr Rahul Leekha	Jharsiguda, Orissa
Ms Sagarika	Adilabad, Andhra Pradesh
Ms Shreya Adhia	Secunderabad, Andhra Pradesh
Ms Vasavi	Hyderabad, Andhra Pradesh
Mr Veerendranath	Hyderabad, Andhra Pradesh

### **Vision Technicians (1 year programme)**

(At B&L School of Optometry)

Mr Thukaram	St Gregorius Balagram Eye Hospital, Yacharam, Andhra Pradesh
Mr Siram Das Jagan	St Gregorius Balagram Eye Hospital, Yacharam, Andhra Pradesh
Mr Shishir Kumar Shukla	MGM Eye Institute, Raipur, Chattisgarh
Mr Balkrishna Shrivastava	MGM Eye Institute, Raipur, Chattisgarh
Mr Ranjeet Kumar Nishad	MGM Eye Institute, Raipur, Chattisgarh
Ms Sunitha Tandon	MGM Eye Institute, Raipur, Chattisgarh
Ms Surekha Sahu	MGM Eye Institute, Raipur, Chattisgarh
Mr Indrasen Kumar Chandan	MGM Eye Institute, Raipur, Chattisgarh
Mr Yuwraj	MGM Eye Institute, Raipur, Chattisgarh
Ms Namratha	MGM Eye Institute, Raipur, Chattisgarh
Ms Seena Simon	MPM Hospital, Jallandhar, Punjab
Ms Kiaran Minj	MPM Hospital, Jallandhar, Punjab
Mr Rajender Kumar Jeengar	HBS Hospital & Medical Research Institute, Jodhpur, Rajasthan
Mr Razak Khan	HBS Hospital & Medical Research Institute, Jodhpur, Rajasthan
Mr Alito Soares De Araujo	Hospital Maliana, East Timor
Mr Joao zinho F Dacruz	Hospital Lospalos, East Timor
Mr Polash	Chandra Prabha Eye Hospital, Assam
Mr Raj Kumar Bhuvan	Chandra Prabha Eye Hospital, Assam
Mr Pushpa Raj	Sri Bharathi Nethra Chikitsalya, Mujungavu, Kerala
Mr Naveen Kumar	MS Reddy Lions Eye Hospital, Moula Ali, Andhra Pradesh
Mr B Raveendra	Siliom Eye Hospital, Madanapally, Andhra Pradesh
Mr Nagaraju	Suryapet Lions Eye Hospital, Suryapet, Andhra Pradesh

**The following candidates were trained as Vision Technicians for placement in Vision Centres attached to our satellites in Mudhol, Toodukurthy and Karamchedu.**

Mr P Narsaiah	Mr Sanjay Kumar
Mr A Sainath	Mr Nagendar Kumar
Mr T Vinay Kumar	Mr Venkata Ramanaiah
Mr G Krishnaiah	Mr J Rajesh
Mr C Ragava Chary	Mr K Jeevan Kumar
Mr Aswini Kumar Goud	Ms J Padma Rani
Mr K Rajesh	Mr M Venkateshwara Rao
Ms Hemalatha	Mr Ragevendra Prasad
Mr R Venkata Ravi Kumar	Mr Narendhar Reddy
Ms Ch Lavanya	Ms Swetha
Mr Sainath	Ms Suneetha
Mr A Om Prakash	Ms Shahin

### **Bausch & Lomb School of Optometry**

Scholarships were awarded to the following students of the BS Optometry programme in recognition of their performance:

**I Batch:** M Manjula, Moniesha, Nisha Singh, Garima Tyagi and Ankit Mathur

**II Batch:** Preethi Gupta, Srujana, Deepthi, Sapna, Nagaraju, Suchi Singh and Vibha Rani Choudhary

**III Batch:** Jaya Dantam, Pavani, D Sateesh Kumar, Somanchi S N V Vamsi, Snigdha, Jit Bahadur, Ravi Chandra, Nisha and G Sethu Mathi

**IV Batch:** Vardaan Sood, Sen Paulami Ashoke, Prachi Lathkar, Sumit Kumar and Kulbhushan Sachdev

## Vision Rehabilitation

### Low Vision Care

Ms Sona Christina	Coimbatore, Tamilnadu	3 months
Mr Caesar Jeffrey Peron	Kuala Lumpur, Malaysia	2 months
Dr Vijay Mohan	Kuala Lumpur, Malaysia	2 weeks
Mr Dharma P Guragain	Jhapa, Nepal	3 months
Ms Eshita Chandrakanth Doshi	Mumbai, Maharashtra	3 months
Mr Ranbir Das Gupta	Kolkata, West Bengal	3 months
Mr Prakash Paudel	Kathmandu, Nepal	3 months
Ms Bhavana Dedhia	Kathmandu, Nepal	3 months
Mr Russel Dias	Mumbai, Maharashtra	1 month
Ms Urmi Vora	Mumbai, Maharashtra	1 month
Mr Miral Shah	Mumbai, Maharashtra	1 month
Mr Nijesh Shah	Mumbai, Maharashtra	1 month
Ms Zaineb Khambaty	Mumbai, Maharashtra	1 month
Dr Ine Renata Musa	Bangdung, Indonesia	1 year (Long-term)

### Vision Rehabilitation Training

Mr Asep Budiwan	Bangdung, Indonesia	6 months
Mr Sutan Syaprudding	Citeureup, Indonesia	6 months

## Eye Bank Training Programmes

### Eye Bank Technician

Mr K Vijaya Bhaskar	Khammam, Andhra Pradesh	3 months
Mr Rajesh Kumar Gupta	Dehradun, Uttarakhand	3 months
Mr Om Prakash Pandey	Gorakhpur, Uttar Pradesh	3 months
Mr V Ramakrishna	Kothagudem, Andhra Pradesh	3 months
Mr K Srinivas	Bhongir, Andhra Pradesh	3 months
Ms Hetel A Patel	Navsari, Gujarat	3 months
Mr Chandra Mohan Roy	Siliguri, Andhra Pradesh	3 months
Ms K S Sasikala	Pathanamthitta, Kerala	3 months
Mr Ch Srinivas	Suryapet, Andhra Pradesh	3 months
Ms V Bhuvaneswari	Pammal, Tamilnadu	3 months
Mr Lalji Yadav	Mumbai, Maharashtra	3 months

### Eye Donation Counsellor

Mr Tarique H Khan	New Delhi	1 month
Ms C Shanti	Chennai, Tamilnadu	1 month
Ms Geeta Kumari	New Delhi	1 month
Mr P B HariKrishnan	Pathanamthitta, Kerala	1 month
Mr C B Verma (Soni)	Jaipur, Rajasthan	1 week
Mr Chandra Mohan Roy	Siliguri, West Bengal	1 week
Ms V Sangeeta	Pammal, Tamilnadu	1 week
Ms Sheetal B Shah	Navsari, Gujarat	1 month

### Eye Bank Manager

Ms Sheetal	New Delhi	1 week
Ms Sheela S Patel	Navsari, Gujarat	1 week
Mr C N Narsimhan	Chennai, Tamilnadu	1 week

### Eye Bank Observors

Dr S T Muralidhar	Bhubaneshwar, Orissa	1 week
Dr Annie Singh	Lucknow, Uttar Pradesh	1 week

## Other Training Programmes

### Eye Care Administration

Mr Denny John Mumbai, Maharashtra 2 months

### Ophthalmic Nursing Assistants

Ms Gayathri Khongwar	Shillong, Assam
Ms G Madhuri	Hyderabad, Andhra Pradesh
Ms P Pavana Kumari	Hyderabad, Andhra Pradesh
Ms M Radhika	Hyderabad, Andhra Pradesh
Ms M Sailaja	Gudiywada, Andhra Pradesh
Ms Sandra Khongwir	Shillong, Assam
Ms N Shivaleela	Nizamabad, Andhra Pradesh
Ms P Kiranmai	Vijayawada, Andhra Pradesh
Ms Khannu	Raipur, Chattisgarh
Ms Anjali Bara	Raipur, Chattisgarh
Ms Manisha	Raipur, Chattisgarh
Ms Ramyan Jurri	Raipur, Chattisgarh
Ms Suman Panjhare	Raipur, Chattisgarh
Ms Chintamani Takem	Raipur, Chattisgarh

### Birla Institute of Technology and Science (BITS) Students - Observer Programme

Mr Sasidhar Darla	Pilani, Rajasthan
Mr Vijay Manem	Pilani, Rajasthan
Ms Aanchal Mittal	Pilani, Rajasthan
Mr Murali Krishna Anagani	Pilani, Rajasthan
Ms Lakshmi Akhila	Pilani, Rajasthan
Mr Vinay Srivastava	Pilani, Rajasthan

## Diploma in Community Eye Health - 2004

Dr P Srinivasa Reddy	Hyderabad, AP	AP Right to Sight Society
Dr G V Prasad	Nellore, AP	MMU, Nellore (AP Right to Sight Society)
Mr Noorudheen	Angamally, Kerala	Little Flower Hospital - Eye Unit (Operation Eyesight Universal)
Mr Sudeep Srivastava	Raipur, Chattisgarh	MGM Eye Hospital
Mr Flashman Anyola	Namibia, Africa	Ministry of Health and Social Service (MHSS, Namibia)
Mr N G S Srinivas	W Godavari, AP	PHC - Kondrukota, Polavaram (AP Right to Sight Society)
Mr D Narasaiah	Karimnagar, AP	DH, Mobile Unit, Karimnagar (AP Right to Sight Society)
Mr R L V Chandrasekhar	Prakasam, AP	PHC - Itamukkala, Prakasam (AP Right to Sight Society)
Mr Ch Ravi Kumar	Adilabad, AP	PHC - Tandur, Adilabad (AP Right to Sight Society)
Mr A Venugopal	Warangal, AP	PHC - Parvathagiri, Warangal (AP Right to Sight Society)
Ms Lalitha Raghuram	Hyderabad, AP	Operation Eyesight Universal, Canada
Mr Mario Serekai	Dilli, East Timor	Ministry of Health (ICEE)
Ms Cheni Lee Hooi	Jakarta, Indonesia	Translator for Mario (ICEE)
Ms Jacqui Ramke	Sydney Australia	International Centre for Eyecare Education (ICEE)
Mr Kamalesh Guha	New Delhi, India	ORBIS India Country Office (ORBIS)
Dr Vera A Essuman	Accra, Ghana, Africa	Presbyterian Central Eye Hospital

ICARE has also conducted training programmes for Nurses and Ophthalmic Assistants for government hospitals sponsored by the AP Right to Sight Society. (See details on ICARE page)

## Worldwide Expertise



The wide network LVPEI has established with institutions and organizations worldwide enables us to draw on an international resource base of senior consultants and experts in every field of eye care. The eminent faculty who delivered lectures at LVPEI during the year were:

**Dr Naresh Mandava**, Director of Retina Service, University of Colorado, Denver, USA, delivered a lecture on "New clinical trials in PVR" on July 22, 2003.

**Dr Mina Chung**, University of Rochester, Rochester, New York, USA, delivered the guest lecture on "Macular Dystrophies" on September 15, 2003.

**Dr Serge Resnikoff**, Head, Programme for the Prevention of Blindness & Deafness, World Health Organisation, Switzerland, spoke on "Challenges in Prevention of Blindness" on September 25, 2003.

**Dr Marilyn Miller**, Professor of Ophthalmology, University of Illinois, Eye and Ear Infirmary, Chicago, Illinois, USA, delivered the guest lecture on "Congenital Lateral Rectus Palsy: Diagnosis, Systemic Associations, and Etiology" on September 26, 2003.

**Professor Hugh R Taylor**, AC, MD, Professor & Chairman of Ophthalmology, University of Melbourne, Australia, spoke on "Diabetic Eye Disease" on September 27, 2003.

**Prof Brien A Holden**, Scientia Professor, University of New South Wales, Sydney, and Vision Cooperative Research Centres, spoke on "The World of Vision Correction" on September 29, 2003.

**Prof Brien A Holden**, Scientia Professor, University of New South Wales, Sydney, and Vision Cooperative Research Centres, spoke on "Vision of Cornea Research Centre, Australia" on October 2, 2003.

**Mr M Ravikanth and Ms V Sangeeta**, optometrists, Myopia Research Laboratory, Department of Optometry and Vision Sciences, University of Melbourne, Australia, spoke on "Emmetropization, neuropharmacological control of Myopia, Molecular Mechanisms of Sclera" on October 11, 2003.

**Prof Orna Gayer**, Department of Ophthalmology, Meir Hospital, Sapir Medical Center, Kfar-Saba, Israel, spoke on "Non-Penetrating Deep Sclerectomy" on October 29, 2003.

**Prof Ehud Assia**, Department of Ophthalmology, Meir Hospital, Sapir Medical Center, Kfar-Saba, Israel, delivered a lecture on "Innovations in Cataract Surgery," on October 28, 2003. He also spoke on "Management of Malposition of lenses" on October 31, 2003.

**Prof Barry Masters**, formerly of University of Berne, Switzerland, spoke on "Differentiation and Proliferation in the Cornea and Clinical Confocal Microscopy of the Eye" on November 4, 2003.

**Dr Srinivas Natarajan**, Professor of Physiology, Pharmacology and Nutrition, The New England College of Optometry, spoke on "Diabetic Eye" on December 6, 2003.

**Dr Jost Jonas**, Professor & Chairman, University Eye Hospital, Schwabachanlage 6, Erlangen, Germany, spoke on "Retinal nerve fiber layer and dynamic optic disc examination" on December 8, 2003.

**Dr G O H Naumann**, Professor and Chairman, Department of Ophthalmology, Friedrich-Alexander-University, Germany, spoke on "Laser-Trephination in Corneal Transplantation," December 8, 2003. He also spoke on 'Bloc-Excision of Epithelial Ingrowth" on December 9, 2003.

**Dr Roger Hitchings**, Professor & Head of Glaucoma, Moorfields Eye Hospital, UK, spoke on "Neuro Rescue or Nothing" on December 10, 2003.

**Dr Amit Bhattacharya**, Systems Manager, Carl Zeiss, spoke on the "Principles of confocal microscope and its application" on December 17, 2003.

**Dr Raj Patil**, Associate Professor, Nebraska Medical Center, Omaha, USA, delivered a guest lecture on

"Aquaporin water channels in eye: need or luxury" on January 20, 2004.

**Dr Iqbal Ahmad**, Director, Neural Stem Cell Research Program, Nebraska Medical Center, Omaha, USA, delivered a guest lecture on "Morphing stem cells: reality or fiction?" on January 21, 2004.

**Dr Shakeel Shareef**, Pennsylvania, USA, delivered a guest lecture on "Treating beyond IOP - human welfare" on February 3, 2004.

**Prof Milko E Iliev**, Department of Ophthalmology, University of Bern, Inselspital, Switzerland, delivered a guest lecture on "Electron microscopic analysis after application of mytomycin C (experimental) and early signs of glaucoma in the morphological analysis" on February 19, 2004.

**Dr Roberto Pineda**, Chief of Ophthalmology, Brigham and Women's Hospital at Boston, USA, and Scholar, Academy at Harvard Medical School, Boston, USA, delivered the Late Shri Pushkarlalji Tibrewala Public Lecture 2004 on "Corneal Transplantation: Recent Advances" on February 19, 2004.

This year we started a series of lectures on subjects other than ophthalmology. These topics were of general interest and delivered by eminent speakers.

**Dr Jayaprakash Narayan**, National Coordinator, Lok Satta, Hyderabad, India, spoke on "Citizen and governance" on February 11, 2004.

## Seminars and Workshops

**A total of 1005 eye care professionals from all over India and a few other countries attended these educational programmes.**

The Institute is a centre for comprehensive education on latest trends in the surgical and medical treatment of eye disorders.

The **Indian Contact Lens Education Program** was conducted from July 20 to 24, 2003; 103 delegates attended the seminar. The programme was sponsored by Bausch & Lomb.

The **Indian Eye Research Group Annual Meet** was organized from July 26 - 27, 2003. Around 150 participants attended the meeting. The Bireswar Chakrabarty Memorial Oration was delivered on July 27, 2003 by Prof. Partha P Majumder, from the Indian Statistical Institute, Kolkata. The topic of the lecture was 'Developing a 20x20 Molecular Vision: some Problems and Strategies'.

The **Retina Congress** was conducted from August 29 to 31, 2003. The highlight of the programme was the interactive sessions. Eighty two registered delegates, 40 ophthalmology fellows and 10 optometry fellows of LVPEI attended the seminar that was sponsored by DORC, Bio Medix, Milmet, Cipla, Novartis, Alcon, Eye Tech Industries, KLB, Micro Vision and Samir Surgicals.

A programme on **Vision Tomorrow, Contact Lens Advances for Eye Care Practitioners**, was conducted on September 6 and 7, 2003. Thirty delegates attended the programme that was sponsored by Johnson & Johnson - Vision Care, India.

There were 29 participants at the **Low Vision Awareness Program** conducted from September 26 to 28, 2003. The programme was sponsored by Sir Ratan Tata Trust, Mumbai.

The **International Ophthalmology Update** was conducted on October 16, 2003, followed by the LVP Alumni Meet on October 17, 2003. Around 80 participants attended the update.

A **workshop on Heidelberg Retina Tomograph II** was conducted on October 26, 2003. The programme was sponsored by Samir Surgicals Pvt. Ltd. and 25 participants attended it.

The **Indian Contact Lens Education Program** was conducted from November 2 - 6, 2003. The seminar was sponsored by Bausch & Lomb; 105 delegates attended it.

A **workshop on ROP** was conducted for ophthalmologists and neonatologists from November 8 - 9, 2003. It was sponsored by Sight Savers International; 50 participants attended the workshop.

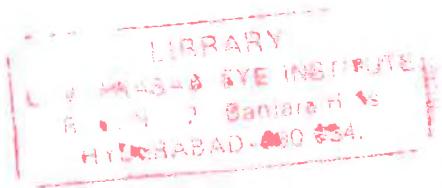
An **Intensive Course on Ophthalmic Pathology** was conducted by Dr Ralph Eagle, head, Ophthalmic Pathology, Wills Eye Hospital, Philadelphia, USA, on January 22, 2004. Eighty delegates attended the workshop.

A **training programme for trainers in IOL and cataract surgery** was conducted on February 11, 2004, in coordination with the Andhra Pradesh Right to Sight Society, with 10 participants.

An **update seminar on stem cell research in India** was conducted from March 8 - 9, 2004. The seminar was sponsored by the Department of Biotechnology, Government of India, New Delhi, and was attended by 80 participants.

The **9th Low Vision Awareness Program** was conducted from March 26 - 28, 2004. There were 31 participants consisting of ophthalmologists, optometrists and rehabilitation professionals. The programme was sponsored by Sir Ratan Tata Trust, Mumbai.

The **Hospital based Training Program on Corneal Transplantation** was held from February 16 - 20, 2004, with Dr Roberto Pineda as its faculty. The programme was organized under the aegis of the Orbis-ESI-LVPEI International Training and Resource Center for Eye Banking and Cornea Transplantation.



## Central Audio-Visual Unit

The Central Audio-Visual Unit (CAVU) produced a record number of 32 video titles that are now available on payment. Eleven of these video titles were entered for international competitions, of which three were accepted for presentation at the American Academy of Ophthalmology (AAO) meet. One title won the second prize for Dr M S Sridhar in the European Society of Cataract and Refractive Surgery (ESCRS) and another won the C S Reshma Gold Award for Dr Anil Kumar Mandal at the 62<sup>nd</sup> All India Ophthalmological Conference (AIOS), Varanasi. The video 'Ocularistry - the face of the future' won the best video prize for optometrist Kuldeep Raizada at the International Congress of Ocular Oncology (ICOO) held at Hyderabad in January 2004 and

the best paper presentation for optometrist Deepa Rani at the All India Optometry Conference held in Kolkata in February 2004.

The CAVU was commissioned to produce a video for the Andhra Pradesh State Ophthalmological Society (APSOS) promoting Hyderabad as a possible venue for the All India Ophthalmological Society annual meetings. We were also commissioned by the Indian Journal of Ophthalmology (IJO) to produce a short version of the video 'IJO - 50 Years of Science Excellence' for presentation to the President of India Dr A P J Abdul Kalam.

Videos produced during the year 32; 368 edited only.

- Dr A K Mandal, Dr Jyoti Bhende - Modern Non-Phaco Manual Sutureless Cataract Surgery : 09:52 min
- Dr A K Mandal, Dr Jyoti Bhende - Surgical Management of Complicated Cataract with Bound Down Pupil : 09:56 min
- Dr M S Sridhar - Ipsilateral Rotational Autokeratoplasty : 09:58 min
- Dr G Chandrasekhar, Dr Kalyani Prasad - Laser Iridotomy : 15:53 min
- Dr A K Mandal, Dr Jyoti Bhende - Surgical Management of Leaking Filtering Blebs : 08:29 min
- Dr Santosh Honavar - Ocularistry: The Face of the Future : 09:59 min
- Dr M S Sridhar - Epithelial In-growth following LASIK : 09:15 min
- Dr Santosh Honavar - Say "Yes" to Hyderabad 2006 - Converge and Connect : 10:28 min
- Dr Merle Fernandes - Blepharitis and Meibomitis: The Burning Issues Instructional : 20:36 min
- Producer, CAVU - Cataract Information 'slide script' video on Cataract Surgery Procedure in English for Patients Waiting in Lounges : 04:00 min
- Producer, CAVU - Dr Anjali Upponi Patil - Announcement to Patients in waiting areas (Patients in lounges) in Hindi asking them to clarify their doubts with patient care supervisors Elena Roopchandra & Satya Joji Prasad : 03:15 min
- Dr Merle Fernandes - Blepharitis and Meibomitis - A Patient Education Film - English : 06:53 min
- Dr Merle Fernandes - Blepharitis and Meibomitis - A Patient Education Film - Telugu : 07:01 min
- Dr V S Sangwan - Processing Amniotic Membrane for Ophthalmic Use : 22:35 min
- Dr M S A Khan, Beula Christy Jachin - Living with Low Vision - Flash News - 'slide script' video : 02:33 min
- Vijaya Kumari Gothwal - Winners in Life - interview of Sahana and Dharmesh Rajdev, Sarvoday Enterprise, Kolkata : 11:38 min
- Dr Merle Fernandes - Blepharitis and Meibomitis - A Patient Education Film - Hindi : 07:03 min
- Prof Ravi Thomas - Blumenthal Technique of Manual Small Incision Cataract Surgery : 48:19 min
- Dr Murali K Aasuri - Dr Bela Kamboj - Phacoemulsification: Principles and Techniques for Nuclear Removal Volume 1 : 41:12 min
- Dr Murali K Aasuri, Dr Bela Kamboj - Phacoemulsification: Principles and Techniques for Nuclear Removal Volume 2 : 45:18 min
- Dr V S Sangwan - Limbal Stem Cell Research From Bench to Bedside - Dr V S Sangwan presented to Dr A P J Abdul Kalam : 03:53 min
- Dr Santosh Honavar, Dr Milind Naik - Lateral Orbitotomy - A Systematic Approach : 07:17 min
- Dr Santosh Honavar - A Second Lease on Life (for presentation at the inaugural of the Paediatric Oncology unit) : 01:24 min
- Dr A K Mandal, Dr Naveena Natcharaju - Paediatric Cataract Surgery - Advantages of in-the-bag IOL Implantation and Peripheral Iridectomy : 09:57 min
- Dr Murali K Aasuri - Challenging Situations in Paediatric Cataract Surgery : 27:17 min
- Dr A K Mandal, Dr Shraddha Sahi - Surgical Repair of Sclero-Limbal Perforation after Enzymatic Sclerostomy using Scleral Patch Graft : 07:14 min
- Dr M S Sridhar, Dr Susmitha G Shah - Late Spontaneous Dislocation or Disenclavation of Iris Claw Intraocular Lens : 06:08 min
- Dr Milind Naik - Botulinum Toxin Injection - The Sting that Soothes! : 10:00 min
- Dr A K Mandal, Dr Jyoti H Matalia - Free Conjunctival Autograft in the Management of Chronic Hypotony when Compression Sutures Failed : 08:25 min
- Dr A K Mandal, Dr Shraddha Sahi - The Technique of Single Suture Trabeculectomy (sale version) : 13:33 min

# Community Eye Health & Outreach

## International Centre for Advancement of Rural Eye Care (ICARE)

The most notable development during this year has been a significant enhancement of our activities at the primary level of eye care. The implementation of the concept of 'Vision Centres', a primary eye care centre for a population unit of 50,000 in underserved areas and managed by a 'Vision Technician' recruited from the same geographic area, which commenced last year has expanded significantly this year with a focused action plan.

During 2004 and 2005 each of our two satellite secondary care centres in Mudhol and Toodukurthy (located in some of the least developed districts) will have a full complement of 10 vision centres attached to them, thanks to support from the Lavalle Fund of New York and Sight Savers International (SSI) of the United Kingdom. This has motivated a Silicon Valley philanthropist to pledge support for the development of vision centres to be attached to our third satellite in Karamchedu of Prakasam district, Andhra Pradesh. This phenomenon is indeed the beginning of a bright future for the primary level of eye care in Andhra Pradesh and India - till now a much-neglected aspect.

Also exciting is the news of optimal performance from our Mudhol centre - a secondary level centre funded by Christoffel Blindenmission (CBM), Sight Savers International (SSI) and a local philanthropist family, Narayana Rao and Rama Rao Patel. The centre's performance statistics are: 14,064 outpatients seen, 2259 cataract surgical procedures performed, 5835 persons screened, 20 patients treated under the community-based rehabilitation (CBR) programme, and attained over 100 percent cost recovery while performing 68% percent surgeries absolutely free of cost. The visual outcomes were 89.7%, with vision recovery between 6/6 to 6/18.

Indeed, this is what we hope to achieve in every rural secondary care centre. All kudos to the team at Mudhol and the ICARE group!

As we move into the new year, several exciting new projects are in the offing.

### A. Service Delivery

#### 1. Village Vision

##### a. Community Eye Care

ICARE develops comprehensive community eye care programmes in the underserved areas of Andhra Pradesh and other parts of India. These programmes are organized at all our satellite and partner centres in rural Andhra Pradesh and across India.

Community eye health workers are trained to conduct door-to-door surveys for the entire population and refer those with eye problems to the community screening programme. Here they are either prescribed glasses or, where necessary, referred to the base hospital for further management. Public awareness campaigns are conducted using posters, banners, pamphlets, dramas, and personal communication. Networking with health care workers, schoolteachers and community leaders makes the programmes sustainable in the long run.

The satellite centres have been organizing community based rehabilitation (CBR) activities in neighbouring villages and have helped 28 patients during the year.

Performance Analysis of Screening Programmes

	School Eye Screening Programme	Satellite Community Eye Screening Programme	Partners Community Eye Screening Programme
No. of schools/CSPs	3	119	19
No. of children screened	575	6,645	2,728
Persons identified with eye problems	61		
Persons prescribed spectacles		2,403	1,027
Persons treated at site		987	1,208
Persons referred to base hospital	61	2,483	589



**Registration of patients and a community screening programme in progress**

#### b. Low Cost Eye Care Financing - Community Assisted and Financed Eye Care (CAFE)

The Community Assisted and Financed Eye Care (CAFE) project was conceptualized as a pilot project to explore the modalities of delivering eye care based on the principle of community assistance through a token self-payment. This would also help to find an entry point for the delivery of other health care services and programmes to an adopted community.

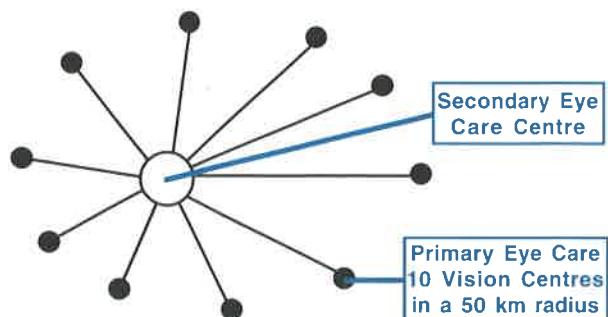
Under the CAFE scheme every member of the community makes a nominal contribution of Re. 1 per person, per

month, and the whole family is registered. The money goes into a community fund and anyone requiring eye care is given a package of services, including a secondary level of eye care that includes surgery, free of cost. In 2001 54,000 persons in 18 villages under Nidadavole, Chagallu and Devarapalle mandals in West Godavari district were enumerated under CAFE, with 32,000 persons registered, 13,500 seen as outpatients and 1400 surgeries performed.

The support for CAFE has been provided by Eye Sight International, Canada, while L V Prasad Eye Institute is the implementing agency. Smt Rajeswari Ramakrishnan Lions Eye Hospital, Nidadavole, is the service provider.

#### c. Primary Eye Care - Vision Centres

During the year five vision centres became fully functional with encouraging results. The following table provides a glimpse of their performance. The Lavelle Fund for the Blind (a New York based international non-governmental organization) has supported the establishment of 20 such vision centres in Mahabubnagar and Adilabad. Similarly Sreekanth Ravi and Sudhakar Ravi, NRIs based in the US, have committed to support the setting up of 10 vision centres that will be attached to our satellite centre in Karamchedu.



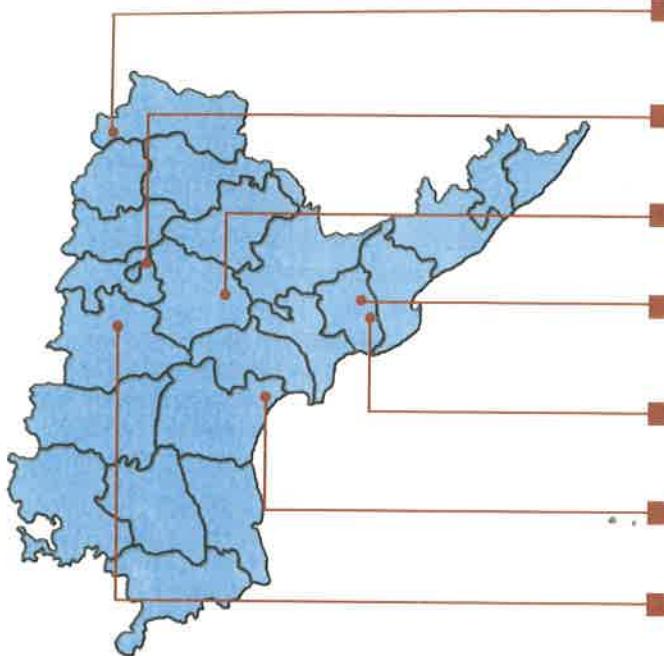
**Performance Analysis of Vision Centres**

Activities	Vision Centres				
	Wanaparthys (237 days)	Bhainsa (235 days)	Chagallu (240 days)	Achampet (60 days)	Kubeer (22 days)
Total screening (Target: 5000/year/VC)	4889	2888	3833	391	330
New prescriptions	1749	906	709	175	127
Referrals to the service centre (Target: 2000/year/VC)	1259	771	1128	1259	123

As is clear, only 25-35% people who underwent screening needed to visit secondary care centres, situated 15-30 km away, thus eliminating that need for the remaining 65-75% to undertake that effort. This constitutes a substantial savings of transportation cost given the economic status of all these families.

**d. Secondary eye care - entire LVP network**

**Andhra Pradesh**



**Our satellite and partner eye centres  
Patient statistics 2003-2004**

<b>Bhosle Gopal Rao Patel Eye Centre</b> Mudhol, Adilabad District Outpatients - 14,064	Surgeries - 2,259
<b>St. Gregorius Balagram Eye Hospital</b> Yacharam, Ranga Reddy District Outpatients - 5,918	Surgeries - 777
<b>Suryapet Lions Eye Hospital</b> Suryapet, Nalgonda District Outpatients - 20,128	Surgeries - 1,343
<b>Mullapudi Venkatarayudu Eye Centre</b> Tanuku, West Godavari District Outpatients - 10,207	Surgeries - 964
<b>Smt. Rajeshwari Ramakrishnan Lions Eye Hospital</b> Nidadavole, West Godavari District Outpatients - 27,675	Surgeries - 4,368
<b>Venkata Lakshmi Eye Centre</b> Karamchedu, Prakasam District Outpatients - 8,551	Surgeries - 1,200
<b>Kuchukulla Ramachandra Reddy Eye Centre</b> Toodukurthy, Mahabubnagar District Outpatients - 11,141	Surgeries - 1682

**2. Hyderabad Outreach Urban Slums Eye Care (HOUSE)**

**a. VST Industries**

ICARE collaborates with Vazir Sultan Tobacco (VST) Industries to provide quality eye care services to underprivileged urban communities in the slums of Hyderabad and Secunderabad. Over 400 slums have been covered under this initiative through a unique door-to-door campaign undertaken by a dedicated team of fieldwork professionals. Persons identified with eye problems are screened and treated at our first vision centre supported by VST Industries. LVPEI and its city partners at Moula Ali, Begum Bazar and Balanagar provide advanced secondary and tertiary level care to those referred by the VST Vision Centre.

ICARE also undertakes School Eye Screening Programmes for all its partner secondary level eye facilities and vision centres to generate awareness about eye health among children, parents and schoolteachers. LVPEI's strategy is to involve teachers to help identify children with poor vision and eye ailments. The teacher aids in the first level screening and thus becomes a potential contributor for future eye health programmes.

**b. Hyderabad partner centres**

Performance of partner centres		
	Outpatients	Surgeries
M S Reddy Lions Eye Hospital Meerpet, Moula Ali, Hyderabad	8,102	691
Kishore Chand Chordia Eye Centre, Hyderabad	10,235	1,067
Balanagar Lions Eye Hospital, Hyderabad	4,562	437
<b>Screening only</b> LVPEI VST Centre Rambnagar, Hyderabad :	9,400	

Performance analysis of screening programmes		
	SSP*	CSP*
No. of schools/CSPs	22	10
No. of children screened	5,099	1,751
Persons identified with eye problems	537	189
Persons prescribed spectacles	—	1,398
Persons referred to base hospital	123	270

\*SSP: School Screening Programme

\*CSP: Community Screening Programme

## **B. Capacity Building and Consultancy Services**

ICARE is actively involved in the capacity building of other facilities, in the areas of infrastructure and human resource development, in addition to setting up systems to ensure technical and financial sustainability. ICARE also provides consultancy services in eye care to international NGDOs and all the implementing agencies of the 'VISION 2020: The Right to Sight – Andhra Pradesh' programme.

### **a. Lions Eye Hospitals in Andhra Pradesh**

L V Prasad Eye Institute received an opportunity to provide technical assistance to the Lions Eye Hospitals in Andhra Pradesh through the Lions Sight First Project 1012, for the period 2003 - 2006. The project aims at developing the capacity of Lions Eye Hospitals in the state by strengthening the infrastructure, developing human resources through training and education, and developing appropriate technology and systems for the delivery of sustainable eye care services. Approximately 15 hospitals will benefit from this partnership.

### **b. Eye Sight International project**

Eye Sight International (ESI), with funding from the Canadian International Development Agency (CIDA) and through its partnership with LVPEI, has supported the capacity building of two hospitals in Andhra Pradesh in 2001 - 2003: the St. Gregorius Balagram Eye Hospital at Yacharam and the Lions Eye Hospital at Suryapet. The support has enabled the hospitals to improve their quality and become self-sustainable financially, technically, and managerially. The hospitals are no longer dependent on LVPEI for their daily functioning, though the partnership remains intact for future development needs. This partnership has helped provide standard eye care facilities to people in the backward districts of Andhra Pradesh.

### **c. Operation Eyesight Universal**

ICARE has been identified as a global resource centre for Operation Eyesight Universal (OEU), a Canadian INGDO. ICARE works with OEU partners in India, Nepal and Bangladesh in the areas of capacity building. At present OEU is directly associated with 20 hospitals to enable them to provide comprehensive and sustainable eye care to their target population.

### **d. Capacity building activities and accompaniment programme for secondary and tertiary level centres**

Last year LVPEI - ICARE has signed memorandums of understanding with the MGM Eye Institute at Raipur (Chattisgarh) and the Chandra Prava Eye Hospital at Jorhat

(Assam) to assist in their capacity building. This includes providing assistance to different levels of centres in the areas of infrastructure development, human resource recruitment and training, development of operating systems and formulation of plans for sustainable working.

Apart from setting up secondary and tertiary eye care centres LVPEI is also involved in evaluating the eye care service delivery in Shroff's Charity Eye Hospital, New Delhi, and the Orbis - SNC - Ronald McDonalds House Charities Pediatric Eye Care Services Project, Chitrakoot in Madhya Pradesh, India. June 6-9, 2003. An MoU was also signed with Rotary Eye Hospital, Proddatur, in Andhra Pradesh for the accompaniment program. The ICARE team also visited eye centres in different parts of India to conduct needs assessment studies.

## **C. Education**

### **a. Diploma in Community Eye Health**

LVPEI's International Centre for Advancement of Rural Eye Care.(ICARE) offers a six-month Diploma in Community Eye Health between January and June every year. This course aims to extend the individual patient-based traditional clinical practice of ophthalmology to the assessment and facilitation of good eye health for the population as a whole. In the past four years 34 ophthalmologists, general physicians, senior paraprofessionals, programme and project managers, and health administrators from Nepal, Sri Lanka, Ethiopia, Germany, Namibia, East Timor, Indonesia and different parts of India have studied under this programme.

This year 11 eye care professionals attended the programme, while five others participated in select modules. They represented INGOs, government agencies and hospitals involved in providing community health care, from East Timor, Namibia, Indonesia, Ghana, Australia and some parts of India.  
(See full list on Education Page)



**Participants of the Diploma Community Eye Health Course 2004 with faculty**

Community Eye Care and Community Based Rehabilitation Workers Training Programme	
Duncan Hospital, Raxaul, Bihar for CEC/CBR Coordinator	1
Organization for Rural Reconstruction (ORRC), Visakapatnam district	8
Society for Community Development (SCD), Srikakulam district	14
Training and Research for Action (TARA), Visakapatnam district	16
Jana Kalyana Samakhya (JKS), Vizianagaram district	16
Community Development Centre (CDC), Vizianagaram district	18
Sangamithra, Medak district	17
Bhosle Gopal Rao Patel Eye Centre, Adilabad district	3
Venkata Lakshmi Eye Centre, Prakasam district	2
St. Gregorius Balagram Eye Hospital, Ranga Reddy district	3



**SSI Partners - CEC/CBR Training Programme field workers in a classroom**

#### **b. Community Eye Care and Community Based Rehabilitation Workers Training Programme**

Field workers from different satellite and partner centres are also trained similarly. They are provided manuals on basic eye care in English and Telugu, as well as other tools like a vision assessment kit, posters and flipcharts. They are also educated about eye care through skits and street plays.

#### **c. Teachers Training**

The community eye care team trains teachers to detect pediatric eye ailments and impart eye health education. The teachers facilitate early detection of vision defects and inform the parents or directly refer the children to qualified ophthalmic personnel. They also ensure that if the children are prescribed spectacles, they continue to use them regularly while reading, writing or working.

Teachers are advised to do eye screening at least once a year, and inform the respective vision centres or secondary level eye facility for further follow-up. Free services in the form of treatment and surgery are provided to those who cannot afford payment.

### **D. Research**

#### **Impact Assessment Study**

A project 'Impact assessment study following cataract surgery' was commissioned to ICARE by Sight Savers International, UK, with technical assistance from the Institute of Health Management in Pachod, Maharashtra. The objective is to study the different dimensions of life before and after cataract surgery. This type of study has

never been done in the field of eye care. The findings of the study are expected by the end of 2004.

### **E. ICARE and VISION 2020: The Right to Sight, Andhra Pradesh**

LVPEI has been training government hospital nurses and technicians sponsored by the AP Right to Sight Society under the VISION 2020: Andhra Pradesh programme. An Ophthalmic Nurses refresher training programme was conducted for five batches from July and August 2003 for 55 participants from the Andhra Pradesh public sector hospitals' eye departments. ICARE also conducted a workshop for the District Programme Managers of the Andhra Pradesh District Blindness Control Society.

### **F. Journal of Community Eye Health: Indian Edition**

The Indian Supplement of the Journal of Community Eye Health published by the International Resource Centre, International Centre for Eye Health (ICEH), London School of Hygiene and Tropical Medicine (LSHTM), UK, has been revived from the January 2004 issue by ICARE - LVPEI for the VISION 2020: India NGO/INGO forum. Support has been pledged for two issues and commitment for 12 more issues till 2006 has been promised by ORBIS India country office for the forum's activities.

In addition to being the official publication of the forum the Indian supplement will provide a medium for dissemination of eye health information for those doing yeoman service in the field of eye care in difficult conditions in the country especially and others generally.

# Eye Research

An integral part of the activities of the Institute is research - both basic and clinical. The Brien Holden Eye Research Centre (BHERC) conducts these research activities through its components such as the Jhaveri Microbiology Centre, the Saroja A Rao Immunology laboratory, the Kallam Anji Reddy Molecular Genetics Laboratory and the Sudhakar and Sreekanth Ravi Stem Cell Laboratory, and the clinical research laboratories.

Basic research is concentrated in these four areas - molecular genetics of inherited eye diseases, microbiology of eye infections, biochemical features of cataract and stem cell technology for reconstruction of the damaged ocular outer surface. Clinical research is pursued along two lines; one is the study of the suitability of using extended wear contact lenses. This involves recruitment of human volunteers, and monitoring their comfort and related factors

upon the use of contact lenses over a period of time. The second area involves the study of the efficacy, pharmacodynamics and related features of ophthalmic drugs such as antibiotics. These studies are conducted in collaboration with pharmaceutical companies.

A team of seven research scientists, and 16 research fellows and project assistants work in basic research projects, in collaboration with 12 ophthalmologists and several ophthalmology fellows. Indeed, an important component of the training of these fellows involves their working at the BHERC on research projects with the scientists. The other notable feature has to do with the choice of research projects. These are based on an analysis of the extensive medical records that have been maintained over the years on all the patients seen at the institute. In addition, the results of epidemiological analysis and prevalence studies conducted by colleagues at ICARE offer insights and leads into the choice of research topics. For example, the APEDS study had suggested the prevalence of primary congenital glaucoma to be 1:3300 among children in Andhra Pradesh, which prompted the study at BHERC on the molecular genetic aspects of this disease.

Research activities at the centre are supported through competitive research grants that have been won by the scientists from national and international agencies and companies. Twelve basic research projects are supported by the Department of Biotechnology (DBT), Department of Science & Technology (DST), Council of Scientific & Industrial Research (CSIR), Indian Council of Medical Research (ICMR), the National Eye Institute (NEI, NIH) and the i2 Foundation from Texas, USA. Clinical research is supported by companies such as Santen, Alcon and CibaVision.

The Institute is recognized by the University of Hyderabad, the Birla Institute of Technology & Science (BITS) at Pilani, and the University of New South Wales, Sydney, Australia, so that research scholars from here can register in any one of them for obtaining their Ph D degrees. Research collaborative agreements have been forged with national laboratories such as the Centre for Cellular & Molecular Biology, Centre for DNA Fingerprinting & Diagnostics, and the Indian Institute of Chemical Technology, all at Hyderabad. These help us to access their sophisticated instruments and facilities for our research.



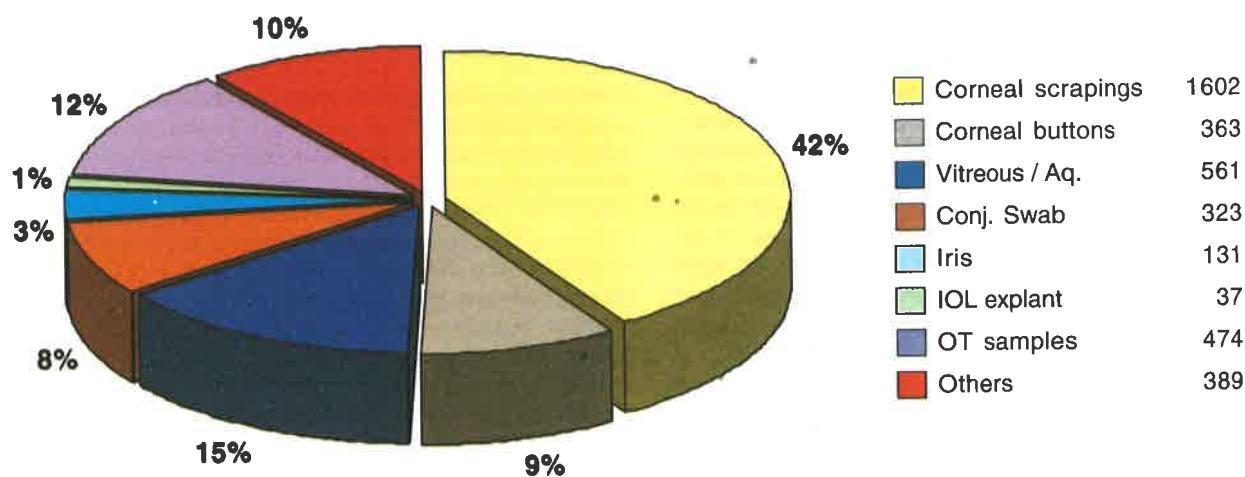
## LVP Clinical Research

The clinical research division of the Institute is engaged in multidisciplinary clinical research of international standards. Sponsored by Indian funding agencies and multinational companies from USA and France, the division conducts not only intramural clinical research, but also participates in multicentre clinical trials. Some of the notable clinical studies in the last couple of years are: the use of fluocinolone aceonide implant in chronic uveitis and diabetic macular edema, and the use of povidone iodine and azithromycin in acute conjunctivitis. Administered by dedicated personnel, including biostatisticians and data entry personnel, the LVP Clinical Research Division has the required capacity and capabilities to conduct several studies.

## Performance Statistics

### Jhaveri Microbiology Centre

The Jhaveri Microbiology Centre processed 3,880 samples during the year.



### Saroja A Rao Immunology Laboratory

The centre processed 1700 serum samples for diagnosis of infectious and non-infectious diseases (CRP, ANA, RA and VDRL). The serology and immunology divisions of this centre tested 1480 samples for HIV and HBV infection for patients undergoing surgery.

Molecular Diagnostics		Diagnostic Virology	
Viral	995	Corneal specimens	707
Fungal	68	Others (Vit., Ac tap, Cor. buttons)	318
Mycobacterium tuberculosis DNA	82	Incl. Bodies/MNGC +ve By Giemsa	69
Ophthalmic Pathology Laboratory		Antigen +ve for HSV1	
Corneal buttons	930	Negative for viruses	128
Small biopsies (from Conjunctiva, Cornea & Iris)	880	PCR positive for HSV DNA	603
Enucleated & Exenterated globes & Eviscerated eyes	210	PCR negative for HSV DNA	346
Lid & Orbital tumors	99	Culture positive for HSV-1	621
Cytology specimens, Bone marrow & CSF samples	117	Culture negative for HSV-1	11
Review slides	10	Culture positive for HSV-1	219

**Specific research projects undertaken during the year**

**In vitro pathogenicity, molecular characterization and molecular validation of Acanthamoeba infections (Inv: Savitri Sharma, Ramesh K Aggarwal (CCMB). Support: Dept. Biotech. (DBT), India)**

In order to characterize Acanthamoeba isolates from keratitis patients, partial 18S rDNA based sequencing was carried out for 12 isolates. Also, to have an insight into the pathogenesis of Acanthamoeba keratitis, levels of IL-1 $\alpha$ , IL-6 and TNF $\alpha$  were estimated from the culture supernate of human corneal epithelial (HCE) cell line infected with Acanthamoeba. This was done using ELISA kits, coated with the respective monoclonal antibody against the particular cytokine.

**Development of molecular probes for the diagnosis of ocular infections caused by viruses, mycobacteria and Acanthamoeba (Inv: Savitri Sharma, D Balasubramanian. Support: Council Sci. Ind. Res. (CSIR), India)**

Under this project DNA probes are being designed for the diagnosis of a variety of eye infections. Sequences for specific domains on a number of genes of herpes simplex virus, cytomegalovirus, varicella zoster virus and Acanthamoeba have already been identified based on available gene sequence data on public domains. Clinical samples are being tested currently by multiplex PCR and dot blot hybridization assay has been standardized for HSV-1.

**Study on Viral Etiology of Congenital Cataract (Inv: R Hari, Nibaran Gangopadhyay. Support: HERF)**

The aim of this project is to establish the viral etiology (HSV, CMV, VZV and Rubella) of congenital cataract using various techniques. Lens aspirate, lens capsule and serum samples of children with congenital cataract were collected and analyzed by techniques including RT-PCR, Multiplex PCR, ELISA and virus isolation for a number of viruses. Of the nine cases collected so far, 4 cases have been identified to be infected with HSV-1 virus and 4 possibly with Rubella. Serum samples from mother and child have been tested for HSV-1 IgG/IgM, HSV-2 IgG/IgM and Rubella IgG/IgM, to establish any transplacental transmission of the virus.

**Investigation of stress responses in Staphylococcus epidermidis causing infectious keratitis and endophthalmitis (Inv: Savitri Sharma, D Balasubramanian. Support: CSIR, India)**

The aim of the project is to investigate the function of putative genes katA and ahpC in S.epidermidis stress response. Primers specific for catalase genes have been designed. Genomic DNA has been extracted from antibiotic resistant varieties of S.epidermidis. Plasmid DNA has been isolated from the plasmid pIC156 and pBT2. PCR is being standardized. Deletion mutant of the genes (katA & ahpC) is to be constructed and characterized.

**Diagnosis of HSV-1 keratitis: Comparison of Giemsa stain, Immunofluorescence assay and Polymerase chain reaction (Inv: R Hari, Savitri Sharma. Support: HERF)**

An analysis on 170 patients clinically suspected of HSV-1 keratitis was carried out to compare three different diagnostic tests against the gold standard of virus isolation. The tests included Giemsa stain, Immunofluorescence assay and Polymerase chain reaction. Out of 170 cases, 14 were culture positive and all of these were PCR positive while IFA and Giemsa showed sensitivities of 85.7% and 57.1% respectively. The specificity of all three tests varied.

**Ocular surface reconstruction using cultured limbal/ corneal epithelium (Inv: Geeta K Vemuganti, Virender S Sangwan, Shashi Singh CCMB). Support: DBT, India)**

More than 150 patients suffering from severe ocular surface were treated with the cultured limbal and conjunctival epithelium generated using the limbal tissue from autologous source or allogenic tissues. Clinical trials were initiated using a "composite culture of limbal and conjunctival epithelium" generated from the limbal and conjunctival tissues using a single amniotic membrane.

**Role of Human Papilloma Virus, Proliferative markers, and p53 in the Genesis and Prognosis of Ocular Surface Squamous Neoplasia (Inv: Geeta K Vemuganti, Chitra Kannabiran, Santosh G Honavar. Support: Ind. Council Med. Res. (ICMR), India)**

Ocular surface squamous neoplasia (OSSN) is a collective term used for the spectrum of squamous neoplasia affecting the conjunctiva and cornea. Though definite data on incidence of OSSN in our country is not available, a recent study (unpublished data) from our tertiary eye care centre reported over 100 cases in a period of 6 consecutive years. It was also found that it occurs mostly in young patients with a mean age of 38 years, some of these patients being sero-positive for HIV. Since UV light is a mutagenic agent for p53, it is possibly involved in the pathogenesis of OSSN. We are in the process of evaluating the role of HPV virus in the causation of OSSN and trying to identify the associated involvement of p53 mutations and the prognostic markers.

**Post-penetrating keratoplasty diagnosis of Herpes simplex virus keratitis using polymerase chain reaction (Inv: Geeta K Vemuganti, Savitri Sharma. Support: HERF)**

To determine the histopathological features of corneal buttons from patients with herpes simplex virus (HSV) keratitis and correlate the results with Polymerase chain reaction (PCR) for HSV. Thirty-three corneal buttons were obtained by penetrating keratoplasty (PK) from patients with clinically suspected HSV keratitis (therapeutic PK-18, optical PK-15). The corneal buttons stained with haematoxylin and eosin were observed for histopathological features at the ophthalmic pathology laboratory.

Unstained sections were used for HSV PCR. Histopathological and PCR findings were analyzed. It was found that no unique histopathology features correlate with the PCR results. Post-PK HSV PCR of corneal tissue may aid in diagnosis of HSV keratitis, if not available prior to PK, and this may help in further management of the patient.

**Investigation of Microsporidial keratoconjunctivitis (Inv: Savitri Sharma, D Balasubramanian. Support: HERF)**

The aim of this project is to analyze the clinical data, diagnosis and treatment profile of patients with Microsporidial keratitis. A molecular diagnostic marker will be developed to rapidly detect and identify Microsporidium species in clinical samples. The PCR assay using the SSU-rRNA specific primers for detection of Encephalitozoon hellem has been standardized, the primers were found specific for E.hellem and its sensitivity was found to be upto 900 picograms. The PCR assay for other species has to be standardized.

**Biological significance of proteolytic enzymes and endogenous tissue inhibitors in the pathogenesis of human fungal keratitis (Inv: Usha Gopinathan, D Balasubramanian. Support: CSIR, India)**

The results of these investigations will provide evidence for the pathogenic role of host factors in the extracellular matrix degradation during fungal keratitis, and help evolve the means to maintain the structural integrity of the corneal tissue during the disease course. This project has just begun; so far the procedure for detection of collagenase and gelatinase in corneal buttons (fungal keratitis) has been standardized.

**In vitro assessment of the effect of cefazolin compared to povidone iodine in adherence of bacteria to broad scleral buckles (Inv: Avinash Pathaney, Savitri Sharma. Support: HERF)**

The aim of this study is to evaluate the efficacy of cefazolin and povidone iodine in preventing adherence of bacteria to scleral buckles to prevent scleral buckle infection, following retinal reattachment surgery. We studied the adherence of *Pseudomonas aeruginosa*, *staphylococcus epidermidis* and *Mycobacterium cheloneal* to scleral buckles and found that povidone iodine is more effective in preventing bacterial adhesion than cefazolin.

**In vitro activity of newer fluoroquinolones: Comparison of ciprofloxacin resistant and ciprofloxacin sensitive *Pseudomonas* spp. isolated from patients with keratitis (Inv: Savitri Sharma, Prashant Garg. Support: HERF)**

Minimum inhibitory concentrations (MICs) of ciprofloxacin, levofloxacin, ofloxacin, moxifloxacin and gatifloxacin were tested by the E-test against 65 clinical isolates of *Pseudomonas* spp. Ciprofloxacin was the most active of the tested agents followed by gatifloxacin and levofloxacin.

Moxifloxacin and ofloxacin were the least active of the fluoroquinolones. All isolates resistant to ciprofloxacin were also resistant to the other agents. This data suggests that ciprofloxacin is superior to the newer fluoroquinolones in the treatment of *Pseudomonas* keratitis. In vitro susceptibility testing, however, is crucial to assess the antimicrobial therapy in any specific location and for each individual agent.

**In vitro susceptibility of gram positive bacteria to newer fluoroquinolones (Inv: Savitri Sharma, Prashant Garg. Support: HERF)**

The purpose of the study is to compare the in vitro susceptibility patterns and the minimum inhibitory concentration (MIC) of gatifloxacin and moxifloxacin to ciprofloxacin, ofloxacin and levofloxacin against bacterial isolates from bacterial keratitis and endophthalmitis. The MIC of 45 gram positive isolates was determined using E test. Based on the in vitro testing, the fourth generation fluoroquinolones, i.e., gatifloxacin and moxifloxacin are shown to have a greater advantage over the second and third generation fluoroquinolones for the treatment of bacterial keratitis and endophthalmitis caused by gram positive bacteria.

**Molecular genetic studies on macular corneal dystrophy (Inv: Chitra Kannabiran, M S Sridhar, Gordon Klintworth (Duke University Medical Center), D Balasubramanian. Support: HERF)**

Macular corneal dystrophy (MCD) involves bilateral opacification of the cornea, and is one of the most common corneal dystrophies requiring corneal grafting. It is a hereditary disease that is transmitted in an autosomal recessive fashion. The genetic basis for this disease lies in pathogenic changes in the gene known as carbohydrate sulfotransferase-6 (CHST6) that codes for an enzyme required for the synthesis of a major macromolecule in the cornea. We carried out a study to screen for changes (mutations) in this gene in patients with MCD and identified 21 different mutations in a study of 37 patients. These mutations are predicted to drastically reduce or abolish the normal functioning of the protein by affecting its structure. This study shows that there are a large number of pathogenic alleles of this gene in Indian patients.

**Genetic analysis of lattice and granular corneal dystrophy (Inv: Chitra Kannabiran, M S Sridhar, Geeta K Vemuganti. Support: HERF)**

Lattice and granular corneal dystrophies are autosomal dominant diseases in which corneal opacities form due to protein deposits within the stroma. These result in a gradual decrease in vision, often requiring corneal grafts. They are due to mutations in the BIGH3 gene. The protein encoded by this gene is required for the normal structure of the cornea. We looked for mutations in the BIGH3 gene in about 45 unrelated individuals (22 with lattice and 23

with granular dystrophy) and attempted to correlate the mutations found with clinical and histopathological characteristics of the disease. We found that most of the patients studied had one of two mutations occurring at "hotspots" that were common in most populations studied so far. In addition, we found some new mutations that have not been described earlier. Further studies will be aimed at trying to understand the mechanism of the disease.

**Molecular genetic analysis of primary congenital glaucoma in Indian populations** (Inv: Subhabrata Chakrabarti, Anil Kumar Mandal, Ravi Thomas, Seyed E Hasnain, Kunal Ray, Partha P Majumder, Dorairajan Balasubramanian. Support: ICMR, DBT and CSIR, India)

In order to understand the molecular mechanism underlying Primary Congenital Glaucoma (PCG), 165 PCG families were screened for mutations in Cytochrome P450 gene (CYP1B1). Seventeen pathogenic mutations in CYP1B1 were observed in 39% of the cases that exhibited 5 specific haplotypes. The myocilin (MYOC) gene (involved in primary open angle glaucoma) was involved in 5% of PCG cases that did not exhibit mutations in CYP1B1. It was also observed that MYOC and CYP1B1 interacted in a digenic fashion in one family. Haplotypes were generated from intragenic single nucleotide polymorphisms (SNPs) in CYP1B1 to understand their role in disease predisposition. The combinations of mutant alleles along with the haplotypes were associated with varying degrees of severity in the phenotype. The study highlights the evolution and role of CYP1B1 mutations in the background of specific haplotypes in PCG that has implications in devising molecular diagnostics.

**Molecular characterization of genes involved in primary open angle glaucoma** (Inv: Subhabrata Chakrabarti, Anil Kumar Mandal, Ravi Thomas, G Chandrasekhar, Seyed E Hasnain, S. Mahalingam, Kunal Ray, D Balasubramanian. Support DST, ICMR and CSIR, India)

In order to understand the molecular genetics of primary open angle glaucoma (POAG), 150 POAG cases were screened for mutations in candidate genes such as MYOC, CYP1B1, OPTN and OPTC. Although MYOC was involved in 4% of the cases, the CYP1B1 gene implicated in congenital glaucoma exhibited mutations in 20% of the cases. To understand the implications of CYP1B1 mutations in POAG, we are currently doing a pull-down assay in order to understand the interactions of MYOC and CYP1B1 proteins and their possible role in the disease pathogenesis. We are also characterizing some polymorphisms in other candidates bearing functional homology to glaucoma genes to understand their association to the disease phenotype.

**Peroxynitrite reaction with eye lens proteins: a-Crystallin retains its activity despite modification** (Inv: Geetha Thiagarajan, J Lakshmanan, Madhavilatha Chalasani, D Balasubramanian. Support: Dept. Sci. & Tech. (DST), India)

Peroxynitrite is a highly potent reactive oxygen/nitrogen species present in the environment, and also endogenously in the eye, leading to a variety of disorders. We undertook this study to look at the oxidative damage that peroxynitrite causes to the proteins of the lens, and the functional consequences thereof. Peroxynitrite was allowed to react with a, b, and g-crystallins. The formation of nitro-tyrosine and nitro-tryptophan, dityrosine, protein covalent cross-links and chain degradation products were monitored using spectroscopic and SDS-PAGE methods. Conformational changes occurring in the protein were monitored using circular dichroism spectroscopy. The chaperoning ability of a-crystallin was assayed by monitoring its ability to inhibit the self-aggregation of two test proteins, b-crystallin and of insulin.

Peroxynitrite reaction produced nitro-tyrosine, nitro-tryptophan, and dityrosine, non-disulfide covalent cross-linked aggregate, as well as peptide chain degradation. The hydroxyl radicals produced by peroxynitrite were seen to cause more chain degradation than the carbonate radicals. The oxidative reaction caused increased conformational disorder. The yield was highest in g-crystallin and least in a-crystallin. Interestingly, the chaperoning ability of a-crystallin was not affected. Peroxynitrite reacts with lens proteins, causing extensive covalent chemical changes. However, a-crystallin retains its chaperoning ability despite the oxidative changes caused by the peroxynitrite reaction, indicating its functional robustness.

**Approaches to relieve the burden of cataract blindness through natural antioxidants: use of Ashwagandha (Withania somnifera)** (Inv: Geetha Thiagarajan, Talla Venu, D Balasubramanian. Support: DST, India)

Cataract is the major cause of blindness the world over. Efforts to ease the cataract burden will be of great social and health economic benefit. Oxidative stress is known to be a major factor in age-related cataract. Regular systemic intake of antioxidant vitamins appears to retard the progression of cataract. These are beyond the reach of people in developing countries who could, however, be encouraged to use antioxidant plant products that form part of their diet and traditional health practices. Ashwagandha (extract of the plant withania somnifera) is one such product used in traditional medicine. We have studied the antioxidant, cytoprotective and related properties of Ashwagandha in this project, and have found it to be excellent in these respects. It is also able to retard the formation of 'cold cataract' in vivo, suggesting that Ashwagandha could well act as a cataracto-static agent.

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## Honors & Awards

### **Dr Subhobrata Chakrabarti**

Won the International Travel Bursary of the International Genetics Federation to attend the International Genetics Congress at Melbourne, Australia, in July 2003.

### **Dr Taraprasad Das**

Member of the Novartis Asia Pacific Advisory Board for Visudyne - 2003.

Honored with the American Academy of Ophthalmology Achievement Award 2003, at its annual meeting at Anaheim, California, USA, in November 2003.

Appointed editor of the ophthalmology section (Associate editor for the journal) of the International Journal of Clinical Medicine and Surgery.

### **S Krishnaiah**

Awarded a Foreign Travel Grant by the Indian National Science Academy (INSA), Government of India, to attend the World Conference on Tobacco or Health at Helsinki, Finland, in August 2003.

Awarded a scholarship by the Cancer Society of Finland and Finnish Center for Health Promotion, Helsinki, Finland, to attend the World Conference on Tobacco or Health at Helsinki, Finland, in August 2003.

### **Dr Anil Kumar Mandal**

Awarded the prestigious Shanti Swarup Bhatnagar Award for 2003 in the field of medical science.

### **Dr Ajit B Majji**

Won the Vengal Rao award for best paper presentation at the APSOS conference held in October 2003 at Eluru, Andhra Pradesh, India.

### **Dr Gullapalli N Rao**

Awarded the First Global Visionary Award instituted by Bausch & Lomb at the annual meeting of the American Academy of Ophthalmology at Anaheim, California, USA, in November 2003.

Conferred *Fellow qua Surgeon ad eundem* of the Royal College of Physicians and Surgeons of Glasgow, University of Glasgow, UK, in November 2003.

Received the HRH Prince Abdulaziz bin Ahmed bin Abdulaziz Al-Saud Award for Prevention of Blindness at Riyadh, Saudi Arabia, in March 2004.

Appointed member of the Editorial Board of Clinical and Experimental Ophthalmology and editor of the 'Anterior Segment' Section at the University of Auckland, New Zealand, in March 2004.

### **Deepa Rani**

Won an award for the best Scientific Paper Presentation on ocular prosthesis at the 7th All India Optometric Conference held at Kolkata, India, in February 2004.

### **Kuldeep Raizada**

Received the Best Video Award for the Video *Ocularistry: The Face of the Future* at the XI International Congress of Ocular Oncology (ICOO 2004), January 23 - 27 2004, Hyderabad, India.

### **Dr Savitri Sharma**

Honored with the American Academy of Ophthalmology Achievement Award 2003 at the annual meeting of the Academy at Anaheim, California, USA, in November 2003.

Elected president of the Indian Association of Medical Microbiologists (IAMM), AP Chapter, for 2004 - 2005, at the seventh annual meeting of IAMM - AP Chapter, held at Vijayawada, India, from February 6 - 8, 2004.

### **Dr G Chandra Sekhar**

Honored with the American Academy of Ophthalmology Achievement Award 2003 at the annual meeting of the Academy at Anaheim, California, USA, in November 2003.

### **Dr M S Sridhar**

Won the best prize at the Alcon video competition at the European Society of Cataract and Refractive Surgery (ESCRS) meeting in Munich, Germany, in September 2003.

### **Dr B R Shamanna**

Appointed head of the Editorial Committee for the Indian Supplement of the Journal of Community Eye Health at the India INGO-NGDO Forum at Madurai, India, on September 1, 2003.

### **Dr S A Khan**

Appointed member of the Advisory Panel of the Task Force, National Association for the Blind, India, in May 2003.

## Presentations

### Balasubramanian D

#### International

##### *Poster presentation*

Association for Research in Vision and Ophthalmology (ARVO) annual meeting 2003, Fort Lauderdale, USA. April 30, 2003.

##### *Invited speaker*

Rockefeller University, New York, USA. May 13, 2003.

Scuola Internazionale Superiore di Studi Avanzati (SISSA - International School for Advanced Studies), Trieste, Italy. June 9, 2003.

Mahidol University and BIOTEC Centre, Thailand. November 23-25, 2003.

Lions International 'Sight First' Symposium, Seoul, Korea. March 26-29, 2004.

Advisory Group meeting, International Council for Science, Paris, France. January 23-28, 2004.

UNESCO Workshop, Islamabad, Pakistan. February 18-24, 2004.

India-Japan Cooperative Science Program, Nippon Institute of Biological Sciences, Tokyo, Japan. March 10-18, 2004.

#### National *Chairman*

Stem Cell Task Force Meeting, Department of Biotechnology, New Delhi, India. July 9, 2003.

New Millennium: India in Technology Leadership Initiative (NMITLI) meeting, LVPEI, Hyderabad, India. July 25, 2003.

Selection Committee, Biospectrum Awards Panel, LVPEI, Hyderabad, India. October 28, 2003.

Second Steering Committee and first Monitoring Committee meeting of the Council of Scientific & Industrial Research, New Millennium India in Technology Leadership Initiative (NMITLI), Sankara Nethralaya, Chennai, India. November 1, 2003.

Stem Cell Task Force meeting, Department of Biotechnology, New Delhi, India. December 19, 2003.

Third Steering Committee meeting of New Millennium: India in Technology Leadership Initiative (NMITLI) program on Eye & Vision, Council of Scientific and Industrial Research, New Delhi, India. February 17, 2004.

Bio-2003, Biotechnology Conference at Bangalore, India. April 16, 2003.

First meeting of the Biotech Research and Promotion Committee, Department of Biotechnology (DBT), New Delhi, India. September 30, 2003.

International Symposium on 'Innovating Drugs: Emerging Perspectives', Dr Reddy's Research Foundation, Hyderabad, India. January 16, 2004.

Anniversary function, Birla Institute of Technology & Science, Pilani, India. March 20, 2004.

#### *Organizer*

Seminar on 'The Non-Communicable Disease Burden in India', Indian National Science Academy, New Delhi, India. August 2, 2003.

##### *Invited speaker*

Public debate on 'Biotechnology - Promise or Peril', Andhra University, Visakhapatnam, India. August 4, 2003.

Lecture on Human Genome, Nuclear Fuel Complex (NFC), Hyderabad, India. August 22, 2003.

National seminar on Modern Biology, Nagarjuna University, Guntur, India. August 28, 2003.

Stem Cell Therapy for the Eye, Central Glass and Ceramics Research Institute, Kolkata, India. September 23, 2003.

Council of Scientific and Industrial Research (CSIR) Foundation Day Lecture, Central Drug and Research Institute (CDRI), Lucknow, India. September 26, 2003.

Lecture on the Human Genome at the University of Hyderabad, Hyderabad, India. November 3, 2003.

International Centre for Genetic Engineering and Biotechnology, India, International Centre, New Delhi, India. November 6, 2003.

Aurora Degree College, Hyderabad, India. November 27, 2003.

Lecture on the Human Genome, Confederation of the Indian Industry, New Delhi, India. December 11, 2003.

Indian Institute of Technology, Chennai, India. January 13, 2004.

Sree Chitra Tirunal Institute for Medical Sciences & Technology, Kerala, India. February 3-8, 2004.

National Science Day oration, Defence Research & Development Organization, New Delhi, India.  
February 28, 2004.

**Panel member**

First meeting of Board of Biotech Education, All India Council for Technical Education, New Delhi, India. October 7, 2003.

Ranbaxy Research Awards 2003 Jury meeting, Ranbaxy Science Foundation, New Delhi, India. November 19, 2003.

'Trendys' meeting, Centre for DNA Fingerprinting & Diagnostics, Hyderabad, India. November 29, 2003.

**Aashish K Bansal**

**International**

**Invited speaker**

'New Techniques in Corneal Surgery' - Annual Symposium of Cataract & Refractive Surgery, San Francisco, USA. April 12-15, 2003.

**Beula Christy**

**National**

**Faculty**

Orientation course for teachers, National Institute for the Visually Handicapped, Chennai, India. April 2, 2003.

National Institute for the Visually Handicapped, Chennai, India. July 17, 2003.

VIII Low Vision Awareness Program, LVPEI, Hyderabad, India. September 26-28, 2003.

CBR field trainees program, LVPEI - ICARE, Kismatpur, Hyderabad, India. November 22-28, 2003.

Training course for Aravind Eye Hospital, Madurai, India, in collaboration with Lighthouse International, USA, LVPEI, Hyderabad, India. December 24-26, 2003.

CBR field trainees program, LVPEI - ICARE, Kismatpur, Hyderabad, India. January 31, 2004.

Orientation course for teachers in special schools for facilitating integration of visually impaired children, National Institute for Visually Handicapped, Vijayawada, India. March 12, 2004.

IX Low Vision Awareness Program, LVPEI, Hyderabad, India. March 26-28, 2004.

**Subhobrata Chakrabarti**

**International**

**Invited speaker**

19th International Genetics Congress, Melbourne, Australia. July 5-12, 2003.

The Centre for Eye Research Australia (CERA), University of Melbourne, Australia. July 8, 2003.

The Cornea and Contact Lens Research Unit (CCLRU), University of New South Wales, Sydney, Australia. July 17, 2003.

Jules Stein Eye Institute, University of California, Los Angeles, USA. November 14, 2003.

National Eye Institute, National Institute of Health, Maryland, USA. November 19, 2003.

Wilmer Eye Institute, Johns Hopkins Medical Institute, Baltimore, USA. November 20, 2003.

Duke University Medical Centre, Durham, North Carolina, USA. November 23, 2003.

Annual meeting of the American Academy of Ophthalmology (AAO), Anaheim, California, USA. November 15-18, 2003.

**National**

Annual meeting of the Glaucoma Society of India, Aravind Eye Care Systems, Madurai, India. September 20, 2003.

**Invited speaker**

Symposium on Genetics and Health, Alexander von Humboldt Foundation, MAHE, Manipal, India. October 29-31, 2003.

30th annual conference, Indian Society of Human Genetics, NIMHANS, Bangalore, India. January 9, 2004.

Faculty of Life Sciences, Banaras Hindu University, Varanasi, India. January 10, 2004.

National conference on 'Human origins, Genome and People of India', Anthropological Survey of India, New Delhi, India. March 24, 2004.

**Faculty**

Instruction course on pediatric glaucomas, All India Ophthalmological Society, Banaras Hindu University, Varanasi, India. January 11, 2004.

**Taraprasad Das**

**International**

**Invited speaker**

GIVRE, annual meeting of the Italian Ophthalmological Society, Regio Calabria, Italy. June 26-28, 2003.

**Faculty**

Tun Hussein Onn Eye Hospital, Kuala Lumpur, Malaysia. June 9-10, 2003.

29th Indonesian Ophthalmologists Meeting, Yogyskarta, Jakarta, Indonesia. June 6-8, 2003.

Retina Society Annual Meeting, Chicago, USA. September 18-21, 2003.

Asia Pacific Academy of Ophthalmology, Bangkok, Thailand. November 27-30, 2003.

**National**

**Faculty**

9th Retina Congress, LVPEI, Hyderabad, India. August 29-31, 2003.

Public lecture on AMD, Rotary International district 3159 Avoidable Blindness program, LVPEI, Hyderabad, India. July 13, 2003.

62nd Annual meeting of the All India Ophthalmological Society Meeting, Varanasi, India. January 8-11, 2004.

Southern Regional Ophthalmic Conference, Chennai, India. August 15-17, 2003.

Vitreoretinal Society of India, 12th Annual Meeting, Claridges Corbett Hideaway, Ramnagar, Uttar Pradesh, India. February 20-22, 2004.

#### **Merle Fernandes**

##### **National Faculty**

Indian Eye Research Group meeting, LVPEI, Hyderabad, India. July 26-27, 2003.

##### **Invited speaker**

Vision Tomorrow - Advanced CL Program, LVPEI, Hyderabad, India. September 6-7, 2003.

Andhra Pradesh Society of Ophthalmologists (Warangal Chapter), Warangal, India. November 16, 2003.

#### **Prashant Garg**

##### **International Faculty**

Ocular Microbiology Immunology Group, Anaheim, California, USA. November 15, 2003.

Annual Meeting of the American Academy of Ophthalmology, Anaheim, California, USA. November 15-18, 2003.

##### **National Faculty**

Workshop on Effective Strategies for Promotion of Eye Donation, Indian Institute of Health Management & Research (IIHMR) Rajasthan, India. August 29-30, 2003.

Training of ECCE + PC IOL Trainers in association with AP Right to Sight Society, LVPEI, Hyderabad, India. February 11, 2004.

Hospital Based Program for 'Training in Corneal Diseases and Eye Banking', LVPEI, Hyderabad, India. February 16-21, 2004.

Workshop, Operation Eye Sight international, LVPEI, Hyderabad, India. February 25, 2004.

#### **Vijaya K Gothwal**

##### **National Faculty**

12th Annual Meeting of the Indian Eye Research Group, LVPEI, Hyderabad, India. July 26-27, 2003.

VIII Low Vision Awareness Program, LVPEI, Hyderabad, India. September 26-28, 2003.

#### **Usha Gopinathan**

##### **National Faculty**

ORBIS - EBAI Symposium on Corneal Transplantation and Eye Banking, Baroda, India. January 20-21, 2004.

Hospital Based Program on anterior segment disorders, LVPEI, Hyderabad, India. February 16-21, 2004.

ORBIS - EBAI HCRP Meeting, Pune, India. March 20-21, 2004.

#### **Santosh Honavar**

##### **International Invited faculty**

Annual meeting of the American Academy of Ophthalmology, Anaheim, California, USA. November 15-18, 2003.

##### **National Faculty**

Oculoplasty Symposium, All Assam Ophthalmological Society, Guwahati, India. June 14-15, 2003.

Oculoplasty Symposium, Poona Ophthalmological Association, Pune, India. June 28-29, 2003.

CME program, Karnataka Ophthalmological Society, Bangalore, India. September 13, 2003.

XI International Congress of Ocular Oncology, Hyderabad, India. January 23-27, 2004.

##### **Invited speaker**

62nd Annual Meeting of the All India Ophthalmological Society, Varanasi, India. January 8-11, 2004.

#### **Nazimul Hussain**

##### **International Invited faculty**

19th Congress of Asia Pacific Academy of Ophthalmology, Bangkok, Thailand. November 29 - December 2, 2003.

##### **National**

Vitreoretinal Society of India - 12th Annual Meeting, Claridges Corbett Hideaway, Ramnagar, Uttar Pradesh, India. February 20-22, 2004.

#### **Subhadra Jalali**

##### **International Invited speaker**

41st International Society for Clinical Electrophysiology of Vision annual meeting, Nagoya, Japan. March 31 - April 4, 2003.

##### **National**

##### **Invited speaker**

CME program, Government Medical College, Jammu, India. May 31, 2003.

##### **Faculty**

9th Retina Congress, LVPEI, Hyderabad, India. August 29-31, 2003.

#### **Sarfaraz A Khan**

##### **National Faculty**

Workshop for Program Managers of the District Blindness Control Societies of Andhra Pradesh, LVPEI - ICARE, Kismatpur, Hyderabad, India. May 19-22, 2003.

CME program on Low Vision Care, Jawaharlal Nehru Medical College, Belgaum, India. April 5, 2003.

9th Retina Congress, LVPEI, Hyderabad, India. August 29-31, 2003.

VIII Low Vision Awareness Program, LVPEI, Hyderabad, India. September 26-28, 2003.

Training course for Aravind Eye Hospital, Madurai, in collaboration with Lighthouse International, USA, LVPEI, Hyderabad, India. December 24-26, 2003.

Symposium on Low Vision Care, Annual 22nd KOS Conference, Belgaum, India. November 7-9, 2003.

International Ophthalmology Update, LVPEI, Hyderabad, India. October 16, 2003.

Diploma in Community Eye Health course (2004), LVPEI - ICARE, Kismatpur, Hyderabad, India. February 9-14, 2004.

IX Low Vision Awareness Program, LVPEI, Hyderabad, India. March 26-28, 2004.

#### ***Invited speaker***

'National Orientation Module' for ophthalmologists organised by Susrut Eye Foundation & Research Centre in collaboration with National Institute for the Visually Handicapped, Kolkata, India. January 31 - February 2, 2004.

Eye Scope 2004, Pediatric Ophthalmology & Strabismus, Bombay City Eye Institute & Research Centre, Mumbai, India. February 14-15, 2004.

#### **Chitra Kannabiran**

##### **National**

##### **Organizer**

12th Annual Meeting of the Indian Eye Research National Group, LVPEI, Hyderabad, India. July 26-27, 2003.

##### **Faculty**

Instruction course, XI International Congress of Ocular Oncology, LVPEI, Hyderabad, India. January 23-27, 2004.

Annual Meeting, Indian Society of Human Genetics, Bangalore, India. January 9-11, 2004.

#### **S Krishnaiah**

##### **International**

##### **Faculty**

12th World Conference on Tobacco or Health, Helsinki, Finland. August 3-8, 2003.

##### **National**

Diploma in Community Eye Health, LVPEI-ICARE, Kismatpur, Hyderabad, India. January 16 - February 7, 2004.

MDRF - UAB International Non-Communicable Disease Symposium, Madras Diabetic Research Foundation, Chennai, India. March 18, 2004.

#### **Joby Kurien**

##### **National**

##### **Participated**

4th Annual Medical Records Conference (MEDRECON), National Institute of Mental Health and Neuro Sciences, Bangalore, India. February 21, 2004.

#### **Anil K Mandal**

##### **International**

##### **Invited faculty**

ORBIS - hospital based training program, National Institute of Ophthalmology, Dhaka, Bangladesh. August 9-13, 2003.

Annual meeting of the American Academy of Ophthalmology, Anaheim, California, USA. November 16-19, 2003.

University of Tennessee, finalization of chapter on 'Pediatric Glaucoma' as a co-author with Dr. Peter A Netland, Memphis, USA. February 22 - March 1, 2004.

##### **National**

##### **Faculty**

CME program on Glaucoma, Ophthalmic Association of Amalapuram, East Godavari, Andhra Pradesh, India. April 27, 2003.

12th Annual Meeting of the Indian Eye Research Group, LVPEI, Hyderabad, India. July 26-27, 2003.

Workshop on Glaucoma, Eye Care and Research Centre, Kolkata, India. August 14, 2003.

Annual meeting of the Glaucoma Society of India, Aravind Eye Care Systems, Madurai, India. September 20, 2003.

62nd annual meeting of the All India Ophthalmological Society, Varanasi, India. January 8-11, 2004.

Workshop on Paediatric Ophthalmology, Indore, India. February 7-8, 2004.

Pediatric Ophthalmology & Strabismus, Mumbai, India. February 14-15, 2004.

Clinical Ophthalmology Update, Apollo Hospitals, Hyderabad, India. March 14, 2004.

##### **Organizer**

IX Annual meeting of Association for Parents of Childhood Glaucoma (APCG), LVPEI, Hyderabad, India. November 27, 2003.

#### **Ajit B Majji**

##### **National**

##### **Invited speaker**

Second surgical intervention for endophthalmitis after initial vitrectomy or vitreous bio, APSOS, Eluru, Andhra Pradesh, India. October 17-19, 2003.

##### **Faculty**

Vitreoretinal Society of India, 12th Annual Meeting, Claridges Corbett Hideaway, Ramnagar, Uttar Pradesh, India. February 20-22, 2004.

**Somasheila Murthy****National  
Faculty**

International symposium on 'Uveitis and Intraocular Inflammation' and 3rd annual conference of the Uveitis Society of India, Post Graduate Institute, Chandigarh, India. February 6-8, 2004.

**Annie Mathai****National  
Faculty**

International symposium on 'Uveitis and Intraocular Inflammation' and 3rd annual conference of the Uveitis Society of India, Post Graduate Institute, Chandigarh, India. February 6-8, 2004.

**Mahalaxmi****National  
Faculty**

Workshop for parents of visually impaired children, National Institute for the Visually Handicapped, Khammam, Andhra Pradesh, India. June 16, 2003.

CBR field trainees program, LVPEI - ICARE, Kismatpur, Hyderabad, India. November 29, 2003.

**Milind Naik****National  
Faculty**

Oculoplasty Update, Nasik Ophthalmic Society, Maharashtra, India. August 24, 2003.

'World of Paediatric Ophthalmology', XXVIII Annual Convention, Vidarbha Ophthalmic Society, Amravati, Maharashtra, India. October 11-12, 2003.

Oculoplasty Symposium, XXIII Annual Conference of Maharashtra Ophthalmological Society, Jalna, Maharashtra, India. October 17-19, 2003.

VII Paediatric Haemato-Oncology Annual Conference, Pune, India. November 8-9, 2003.

Eyescope 2004: Paediatric Ophthalmology Conference, Mumbai, India. February 14-15, 2004.

XI International Congress of Ocular Oncology, Hyderabad, India. January 23-27, 2004.

**Nagagurappa****National  
Faculty**

CBR field trainees program, LVPEI - ICARE, Kismatpur, Hyderabad, India. December 1, 2003.

**Avinash Pathengay****National  
Invited speaker**

Andhra Pradesh Society of Ophthalmologists (Warangal Chapter), Warangal, India. November 16, 2003.

**M N K E Prasad****National  
Organizer**

Eye Donation Awareness Campaign, Nagarkurnool, Andhra Pradesh, India. February 20, 2004.

**Gullapalli N Rao****International  
Invited speaker**

Centre for Eye Research, University of New South Wales, Melbourne, Australia. April 11, 2003.

Vision Care Delivery Planning Workshop, Organised by Vision CRC, Melbourne, Australia. April 12, 2003.

Centre for Contact Lens Research Unit, Sydney, Australia. April 15, 2003.

Annual General Body meeting, Operation Eyesight Universal, Calgary, Canada. April 24, 2003.

Association for Research in Vision and Ophthalmology / ISER - International Advocacy, Fort Lauderdale, USA. May 5, 2003.

Telugu Association of North America (TANA), Silver Jubilee Awards Celebration, San Jose, USA. July 4, 2003.

Symposium on 'The Global Effort to Eliminate Blinding Trachoma', 5th anniversary of International Trachoma Initiative, New York, USA. November 11, 2003.

Speakers Showcase, Bausch & Lomb, Rochester, USA. November 12, 2003.

21st Annual Symposium of the King Khaled Eye Specialist Hospital and the 17th Annual Scientific Meeting of the Saudi Ophthalmological Society, Riyadh, Saudi Arabia. March 8-10, 2004.

Bausch & Lomb's 150th Anniversary Event, Hong Kong, China. March 19, 2004.

**National  
Invited speaker**

Shielding Children from Accidents, The Institute of Health Systems, Hyderabad, India. April 7, 2003.

Inauguration of VISION 2020: The Right to Sight - Karnataka, Bangalore, India. July 25, 2003.

Burden of Non-communicable Diseases in India, Indian National Science Academy, New Delhi, India. August 2, 2003.

Workshop on Communication Strategies for Prevention of Corneal Blindness and Promotion of Eye Donation, Organised by Ministry of Health & Family Welfare, Jaipur, India. August 29-30, 2003.

Global blindness and VISION 2020, VISION 2020: The Right to Sight Workshop on Community Eye Health, LVPEI - ICARE, Kismatpur, Hyderabad, India. October 10-11, 2003.

XXIII Annual Conference of Maharashtra Ophthalmological Society, Jalna, Maharashtra, India. October 18-19, 2003.

Lions Eye Hospitals Meet, Secunderabad, India.  
October 23, 2003.

Indian Eye Banking Education Programme - West Zone,  
Jaipur, India. December 20-21, 2003.

**Chief Guest**

Dr Sandeep Wagh Eye Centre, Pune, India.  
December 6, 2003.

**Faculty**

Operation Eyesight Universal - partner networking  
workshop, LVPEI - ICARE, Kismatpur, Hyderabad, India.  
February 22-25, 2004.

Program for the partners meeting of the Orbis supported  
Eye Health Care Financing Pilot Project, LVPEI - ICARE,  
Kismatpur, Hyderabad, India. March 3-4, 2004

**B Venkateshwar Rao**

**National**

**Faculty**

CME workshop, Medical College, Kakinada, Andhra  
Pradesh, India. April 26-27, 2003.

Pediatric ophthalmology meeting, Sankara Nethralaya,  
Chennai, India. June 8, 2003.

CME program on cerebral palsy, Nizam's Institute of Medical  
Sciences, Hyderabad, India. August 24, 2003.

CME, Pradeep Swarup Eye Centre, Hyderabad, India.  
August 31, 2003.

**Kuldeep Raizada**

**National**

**Participated**

62nd Annual Meeting of the All India Ophthalmological  
Society, Varanasi, India. January 8-11, 2004.

**Invited speaker**

XI International Congress of Ocular Oncology, Hyderabad,  
India. January 23-27, 2004.

31st Congress of Indian Contact Lens Education Program  
(ICLEP), LVPEI, Hyderabad, India. November 2-6, 2004.

**Laxman Rao**

**National**

**Faculty**

CBR field trainees program, LVPEI - ICARE, Kismatpur,  
Hyderabad, India. December 3-18, 2003.

**Nutheti Rishita**

**National**

**Invited speaker**

21st Annual Conference of Indian Society For Medical  
Statistics, Desert Medicine Research Centre, ICMR,  
Jodhpur, India. November 28-30, 2003.

**Virender S Sangwan**

**International**

**Faculty**

ORBIS - hospital based training program, National Institute  
of Ophthalmology, Dhaka, Bangladesh.  
August 24-30, 2003.

Pan Arabic Ophthalmic Conference, UAE,  
December 9-12, 2003.

**National**

**Invited speaker**

Cornea Recent Advances and Future Trends (CRAFT),  
Thiruvananthapuram, Kerala, India. June 14-15, 2003.

International Update in Ophthalmology, LVPEI, Hyderabad,  
India. October 16, 2003.

Annual meeting of Bombay Ophthalmologists Association,  
Mumbai, India. December 26-28, 2003.

Indo-US Workshop on Tissue Engineering & Stem Cell  
Technologies, Thiruvananthapuram, India.  
February 2-4, 2004.

International Symposium on 'Uveitis and Intraocular  
Inflammation', 3rd Annual Conference, Uveitis Society of  
India, Post Graduate Institute, Chandigarh, India.  
February 6-8, 2004.

STEMSEM: An update seminar on stem cell research in  
India, LVPEI, Hyderabad, India. March 8-9, 2004.

Clinical update in Ophthalmology, Apollo Hospitals,  
Hyderabad, India. March 13-14, 2004.

**Savitri Sharma**

**International**

**Faculty**

107th annual meeting of American Academy of  
Ophthalmologists, Anaheim, California, USA.  
November 15-18, 2003.

**National**

**Chairperson**

27th National Congress of Indian Association of Medical  
Microbiologists, Mumbai, India. November 6-8, 2003.

**Invited speaker**

Bharatiya Vidya Bhavan's Vivekananda College of Science,  
Humanities & Commerce, Sainikpuri, Secunderabad,  
India. January 28, 2004.

Bombay Ophthalmologists Association, Bombay Hospital,  
Mumbai, India. February 1, 2004.

Comparative and Functional Genomics, 8th ADNAT  
meeting, Centre for Cellular and Molecular Biology,  
Hyderabad, India. February 23 - 24, 2004.

**M S Sridhar****International*****Invited speaker***

2nd Allergan Asia Pacific Dry Eye Advisory Board Meeting, Bangkok, Thailand. November 28, 2003.

Annual meeting of the American Academy of Ophthalmology 2003, Anaheim, California, USA. November 15-18, 2003.

**National*****Faculty***

CME program on Cornea & External disease, Bangalore, India. April 19-20, 2003.

CME program on Cornea & External disease, Navsari, Gujarat, India. April 27, 2003.

62nd annual meeting of the All India Ophthalmological Society, Varanasi, India. January 8-11, 2004.

'Diagnosis and Management of Dry Eyes', CME program, Tirupati Ophthalmology Society, Tirupati, India. January 28, 2004.

**G Chandra Sekhar****International*****Invited speaker***

Represented SEAGIG at the global consensus meeting, San Diego, USA. November 13-14, 2003.

Annual Meeting of American Academy of Ophthalmology, Anaheim, California, USA. November 16-19, 2003.

Strong Memorial Institute, Rochester University Medical School, Rochester, USA. November 20, 2003.

**National*****Faculty***

62nd annual meeting of the All India Ophthalmological Society, Varanasi, India. January 8 - 11, 2004.

***Invited speaker***

Workshop on 'Inclusion of Community Eye Health in Ophthalmology residency program in India', LVPEI-ICARE, Kismatpur, Hyderabad, India. October 10-11, 2003.

Annual meeting of Maharashtra State Ophthalmic Society, Ganapathi Netralaya, Jalna, Maharashtra, India. October 18-19, 2003.

Glaucoma Update, Sankara Netralaya, Chennai, India. December 5 - 6, 2003.

JLN Hospital & Research Centre, Bhilai, India. February 7-8, 2004.

Kanchan Eye Hospital & Research Centre, Hyderabad, India. February 15, 2004.

**Shamanna B R****International*****Faculty***

Pacific Eye Health Workers Workshop, Lautoka, Fiji Islands, Fred Hollows Foundation, New Zealand. April 28-30, 2003.

***Invited speaker***

Fred Hollows Foundation, Sydney, Australia, May 1, 2003.

Evaluation meeting of Regional Resource Centres IRC-International Centre for Eye Health, London School of Hygiene and Tropical Medicine, London, United Kingdom. July 13-17, 2003.

VISION 2020: The Right to Sight, Biennial meeting of the SE Asian and Pacific regions, Asia Pacific Academy of Ophthalmology, Bangkok, Thailand. December 2-4, 2003.

Eye Hospital Administrators Workshop of Jiangxi Province, China, supported by the Fred Hollows Foundation (Australia), Ga'olan, China. December 10-13, 2003.

***Evaluator***

Orbis-SNC-Ronald McDonalds House Charities Pediatric Eye Care Services Project, Chitrakoot, Madhya Pradesh, India. June 6-9, 2003.

'Training of Trainers' for evaluation of training & curriculum for refractive services, University of Westville, Durban, South Africa. March 22-28, 2004.

**National*****Faculty***

Training of staff for Community Eye Care Programs supported by Sight Savers, Jeevan Jyoti Hospital, Haldwani, UP, India. May 10, 2003.

Training of staff for Community Eye Care Programs supported by Sight Savers, Dhamtari Christian Hospital, Chattisgarh, India. May 22, 2003.

OEU Partners Workshop, LVPEI, Hyderabad, India. February 22-25, 2004.

***Organiser***

'VISION 2020: The Right to Sight' - Karnataka Workshop for Policy Formulation, DANPCB, Bangalore, India. July 24-27, 2003.

Development of Curriculum for Pediatric Eye care team training programs, Medical College, Pondicherry, India. September 30, 2003.

Curriculum Development Meeting for Community Based Mid Level Eye Personnel in India, NPCB, MOHFW, RP Centre for Ophthalmic Sciences, AIIMS, New Delhi, India. October 6-7, 2003.

Workshop on Community Eye Health for inclusion of Community Eye Health in Ophthalmology Residency programs in India, LVPEI - ICARE, Kismatpur, Hyderabad, India. October 10-11, 2003.

Needs Assessment Visits Pediatric Eye Care Projects, Guntur & Medchal, Andhra Pradesh, India. October 22-23, 2003.

Orbis - LVPEI - SVYM - APMAS, Eye Health Financing Planning Meeting, LVPEI - ICARE, Kismatpur, Hyderabad, India. March 3-4, 2004.

MDRF - UAB International Non-Communicable Disease Symposium, Madras Diabetic Research Foundation, Chennai, India. March 18, 2004.

#### **Sharmila M**

##### **National Faculty**

Orientation course for teachers, National Institute for the Visually Handicapped, Hyderabad, India. April 2, 2003.

CME program on Low Vision Care, Jawaharlal Nehru Medical College, Belgaum, India. April 5, 2003.

Training program for the CBR staff, Action on Disability & Development (ADD) partners, Kolkata, India. July 16, 2003.

VIII Low Vision Awareness Program, LVPEI, Hyderabad, India. September 26-28, 2003.

Training program for teachers to train children with multiple disabilities, LVPEI, Hyderabad. All Saturdays in September - October 2003.

Training of community workers on disability, Action on Disability & Development (ADD) India, Kothakota, India. September 18, 2003.

Workshop on management of pre-school children with visual impairment, National Institute for Mentally Handicapped, Secunderabad, India. August 13, 2003.

Workshop for parents of visually impaired children with additional disabilities, National Institute for Visually Handicapped, Secunderabad, India. September 22, 2003.

Training program for teachers of children with multiple disabilities, National Institute for Mentally Handicapped, Secunderabad, India. October 15, 2003.

International short course on working with children with multiple disabilities, Clarke School for the Deaf and the Mentally Retarded, Chennai, India. November 12, 2003.

CBR field trainees program, LVPEI - ICARE , Kismatpur, Hyderabad, India. November 21-27, 2003, and January 30, 2004.

Project on integration and development of persons with multiple disabilities, Velugu project, (Council for Advancement of People's Action and Rural Technology, Government of India, New Delhi) Madanapalli, India. February 6-7, 2004.

Refresher course for low vision teachers, National Association for the Blind, Bangalore, India. February 16, 2004.

##### **Organizer**

State level network meet for CBR Forum partners, Bausch & Lomb School of Optometry, Hyderabad, India. September 19, 2003.

##### **Invited speaker**

National Program on orientation of medical officers working in primary health centres, Thakur Institute of Research and Rehabilitation for the Mentally Handicapped, Hyderabad, India. September 24, 2003.

#### **M Srinivas**

##### **International**

NEI/WHO supported workshop, Selayang Eye Hospital, Kuala Lumpur, Malaysia. March 8-13, 2004.

##### **National Faculty**

Diploma in Community Eye Health course, LVPEI - ICARE, Kismatpur, Hyderabad, India. February 9-14, 2004.

Seminar on Madras Diabetes Research Foundation and University of Alabama, Birmingham, USA, Chennai, India. March 18-21, 2004.

#### **Ravi Thomas**

##### **International**

##### **Invited speaker**

Association for Research in Vision and Ophthalmology (ARVO) Annual Meeting - 2003, Fort Lauderdale, USA. May 4-9, 2003.

Glaucoma Society of the International Congress of Ophthalmology, Chantilly, France. May 29-31, 2003.

Glaucoma in the 21st Century, Pharmacia Meeting, Monte Carlo, Italy. June 19-22, 2003.

Swiss Glaucoma meeting, Montreux, Switzerland. June 26, 2003.

Annual meeting of the Egyptian Ophthalmological Society (EOS), Cairo, Egypt. March 10-12, 2004.

##### **National**

##### **Invited speaker**

Glaucoma seminar - Gujarat meeting, Surat, India. April 5-7, 2003.

Glaucoma seminar, Ludhiana, India. April 12-13, 2003.

Glaucoma seminar, Simla, India. April 14-18, 2003.

Glaucoma seminar, Nagarcoil Ophthalmic Association, Thiruvananthapuram, India. July 17-21, 2003.

Glaucoma seminar, Lucknow Ophthalmic Association, Lucknow, India. August 2-4, 2003.

Glaucoma Seminar, Ahmedabad Ophthalmic Society, Ahmedabad, India. September 2-6, 2003.

Southern Region Ophthalmic Committee, 51st Tamilnadu Ophthalmic Association Meeting, Chennai, India. August 15-18, 2003.

Seminar on Small Incision Cataract Surgery, Aditya Jyothi Eye Hospital and Bombay Ophthalmic Association, Mumbai, India. August 30-31, 2003.

Glaucoma Society of India, Tirunelveli, India. September 18-21, 2003.

IX Kanchan Memorial Oration, Kanchan Eye Hospital & Research Centre, Hyderabad, India. February 15, 2004.

### **Geeta K Vemuganti**

#### **International**

##### ***Invited speaker***

Annual meeting of American Academy of Ophthalmic Pathologists, Anaheim, California, USA. November 15, 2003.

Nebraska University Medical Centre, Omaha, USA. November 19, 2003.

University of Rochester, Rochester, USA. November 24, 2003.

Roslin Institute, Edinburgh, UK. December 1, 2003.

Institute of Stem Cell Research, University of Edinburgh, UK. December 3-4, 2003.

#### **National**

##### ***Invited speaker***

Stem Cell Workshop, Bangalore, India. April 24, 2003.

National Centre for Cell Sciences, Pune, India. May 10, 2003.

Stem cell research - relevance to organ transplantation, national meeting of Indian Society of Organ Transplantation. Hyderabad, India. August 8-10, 2003.

'Clinical application of stem cell technology', Aurora Degree College, Hyderabad, India. August 12, 2003.

Seminar on stem cell relevance to clinical application, Department of Neurophysiology, National Institute of Mental Health and Neurosciences, Bangalore, India.

August 18, 2003.

Symposium on DNA Helix, Kakatiya University, Warangal, India. December 30, 2003.

Instruction course on Tumors of the Eye & Adnexa - Expect the unexpected, All India Ophthalmological Society, Varanasi, India. January 9, 2004.

XI International Congress of Ocular Oncology (ICOO), LVPEI, Hyderabad, India. January 23-27, 2004.

Seminar on Animal Cells: Culture and Differentiation, Kakatiya University, Warangal, India. March 13, 2004.

#### ***Chairperson***

STEMSEM: An 'update seminar on stem cell research in India, LVPEI, Hyderabad, India. March 8-9, 2004.

Slide Seminar, 21st Meeting of the Indian Association of Pathologists and Microbiologists, Tirupati, India. September 6-7, 2003.

### **Jachin D Williams**

#### **National**

##### ***Organizer / Faculty***

Community Eye Health Workers Training Program sponsored by Sight Savers International, LVPEI-ICARE, Hyderabad, India. May 15 - June 6, 2003.

Community Eye Health Awareness Program, Godavarru, India. June 19-21, 2003.

Community Based Rehabilitation training program for Sight Savers International partner agencies, LVPEI-ICARE, Kismatpur, Hyderabad, India. November 20 - December 19, 2003.

Diploma in Community Eye Health, LVPEI-ICARE, Kismatpur, Hyderabad, India. January 16, 2004 and February 9-14, 2004.

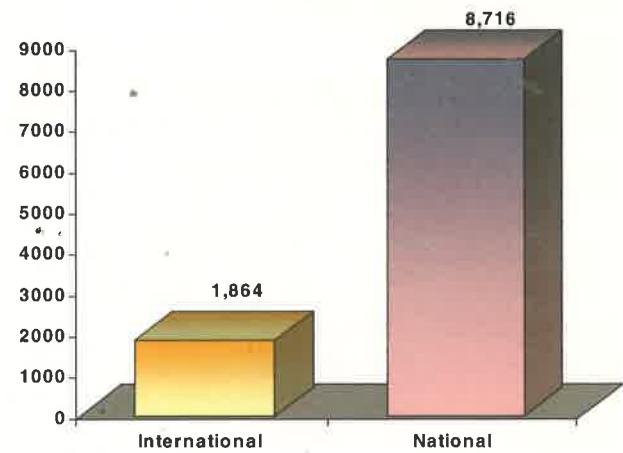
CBR Field workers Training Program, LVPEI-ICARE, Kismatpur, Hyderabad, India. January 27 - February 19 and March 22 - April 10, 2004.

Training of Trainers for Community Eye Health Workers workshop, Chitrakoot, India. March 1-10, 2004.

# Product Development

## Rotary Club of Hyderabad Corneal Preservation Medium Centre

The International Federation of Eye & Tissue Banks, Baltimore, USA, supports the production of the Mc Carey Kaufman (MK) medium at the RIEB. A total of 11,493 MK medium vials were prepared during the year. The eye bank distributed 8,716 vials to 126 national eye banks and 1,864 vials were sent to five international eye banks.



### Distribution of Corneal Preservation Medium

#### International

Nepal	Agartala	Erode	Jamnagar
Pakistan	Ahmedabad	Ghatkopar	Jamshedpur
Philippines	Amritsar	Gorakhpur	Jorhat
Slovakia	Angamally	Gudur	Kadiri
Turkey	Bagalkot	Guwahati	Kanpur
	Bangalore	Hissar	Karnal
	Bareilly	Hospet	Khammam
	Bathinda	Howrah	Khargaan
	Bhavnagar	Hubli	Kolkata
	Bhopal	Hyderabad	Kozhikode
	Bhubaneshwar	Indore	Lucknow
	Bilaspur	Jaipur	Madurai
	Chandigarh	Jalandhar	Mahaboobnagar
	Chennai	Jalgaon	Mandya
	Coimbatore	Jalna	Mangalore

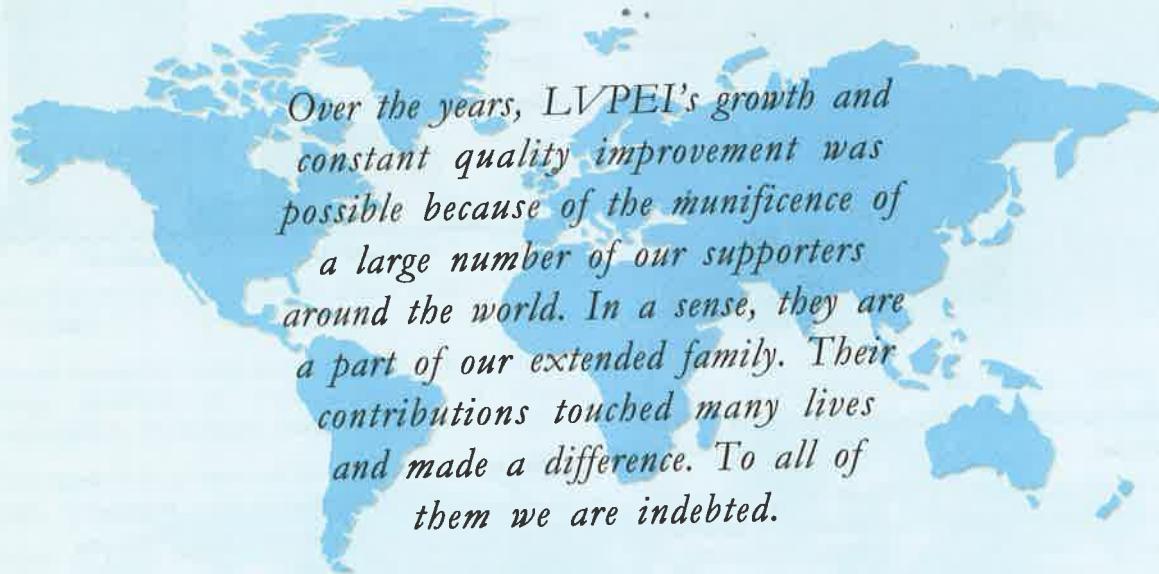
#### National

Manipal	Ongole	Sirsa
Masoli	Palakol	Sohana
Meerut	Panvel	Solapur
Miraj	Patiala	Sri Ganganagar
Mumbai	Pathanthitta	Surat
Mysore	Pondicherry	Suryapet
Moradabad	Porbandar	Tanuku
24 North Parganas	Pune	Thiruvananthapuram
Nagpur	Rajkot	Tiruchirappalli
Nashik	Rampur	Udaipur
Navsari	Ranchi	Vadodara
Neemuch	Rattanpura	Varanasi
New Delhi	Repalie	Vellore
Nidadavole	Salem	Visakhapatnam
Noida	Sevagram	Vizianagaram
	Shree Ram Nagar	Vuyyur

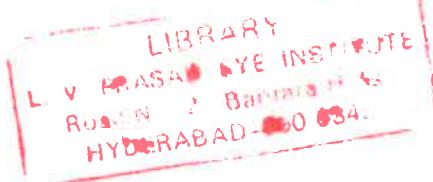
### Distribution of Amniotic Membranes

Of the 735 amniotic membrane pieces processed by the RIEB during the year, 339 were made available for surgeons in the Institute for ocular surface surgery and reconstruction and 287 pieces were used in research.

## Our Support



*Over the years, LVPEI's growth and constant quality improvement was possible because of the munificence of a large number of our supporters around the world. In a sense, they are a part of our extended family. Their contributions touched many lives and made a difference. To all of them we are indebted.*



## The Ravi brothers - a wall of support

Sreekanth Ravi and Sudhakar Ravi from Andhra Pradesh went to the United States as children, with their parents. The brothers rose from humble beginnings, by manufacturing ethernet cards for Macintosh computers in the early '90s. Sudhakar, however, was an inventor at heart and experimented with different kinds of software.

Their defining moment came in 1996 when their company installed a high speed Internet connection. They now needed a high quality firewall to guard against computer viruses, but were stunned to find that even the cheapest protection system cost \$20,000 - far beyond their modest means.

The Ravi brothers decided to develop an affordable firewall for small and medium sized offices such as theirs. Their products became an instant hit, with orders pouring in as more and more US companies switched to high-speed and "always-on" Internet connections. Based in San Francisco, California, the Ravi brothers today own one of the largest world class security solutions company, SonicWALL, Inc. In 2000 SonicWALL was valued by Wall Street at over a billion dollars.

SonicWALL designs, develops, manufactures and sells Internet security infrastructure products to provide secure Internet access to broadband customers, enable secure Internet-based connectivity for organizations and process secure transactions for enterprises and service providers. It also markets value-added security applications for its access security appliances, including content filtering and anti-virus protection.

The Ravi brothers' first contribution to LVPEI came in 2002. They were impressed by the number of patients seen in LVPEI's Out-patient Department, especially the number of non-paying patients. To acknowledge their generous



Sreekanth & Sharmila Ravi



Sudhakar & Sumithra Ravi

contribution, our outpatient care centre has been named after their grandparents, Dr Panda Satyanarayana and Smt Paripurnamma. The brothers have also given support to the Institute's Stem Cell Laboratory, which is named Sreekanth and Sudhakar Stem Cell Biology Laboratory. They promise to continue supporting LVP in the future as well..

Sreekanth Ravi and Sudhakar Ravi spoke on their decision to support LVPEI:

*"We chose to support LV Prasad Eye Institute based on what we think are three critical success factors:*

- 1. The focus is on providing a high level of eye healthcare to the poorest of the poor. We have a strong commitment to the philosophy that "Healthcare is a right, not a privilege" and we believe that LVPEI shares and practices this view.*
- 2. The Founder/President (Dr G N Rao) is dedicated and has the drive and passion to "will" success. Further, we view the operation of LVPEI as being run strategically and efficiently, much the same way a successful business would be run.*
- 3. The research and education components of the work being done by LVPEI satisfies an additional aspect of what we feel is necessary to achieving long term success in providing healthcare to the poor. This includes modifying processes and procedures to suit local needs and then using this research to educate the care givers and the client base on how to live healthier lives.*

*Recently we decided to support groundbreaking research being done at LVPEI on stem cells and their ability to cure certain forms of blindness. As this type of research is being done at only a handful of other institutions worldwide (with all others in Western countries), it further demonstrates to us that LVPEI is at the forefront of eye healthcare and its efforts continue to benefit tens of thousands of patients annually, who would otherwise suffer needlessly and be unable to lead productive lives. We are very proud and honored to be associated with the LVPEI".*

## Dr K Anji Reddy - a visionary friend

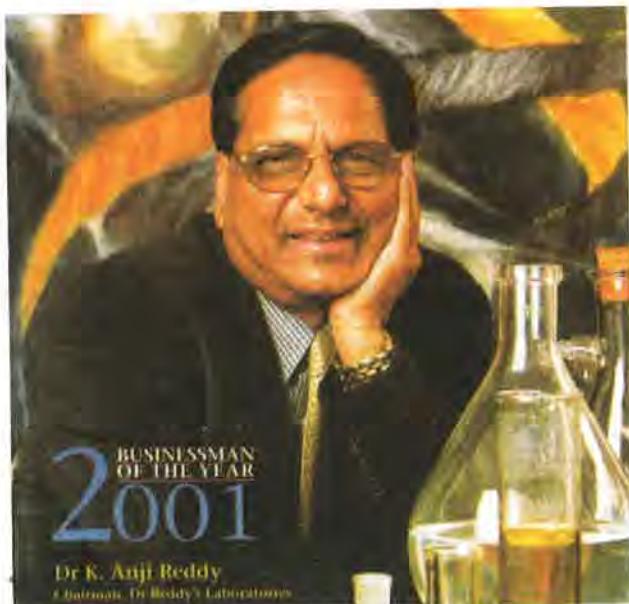
Dr K Anji Reddy is the Founder and Chairman of the Board of Directors of Dr Reddy's Laboratories, an emerging global pharmaceutical company. Dr Reddy's Laboratories Limited covers the entire spectrum of the pharmaceutical value chain - basic research, bulk actives, finished dosages, generics, biotechnology and diagnostics. Launched with the aim of bringing advanced medicines to the Indian masses at affordable prices, the company has now become a key generic player, making its presence felt in the US, Europe, Japan and several developing countries. Dr Reddy's was the first Indian pharmaceutical organization to undertake basic research with the setting up of Dr Reddy's Research Foundation (DRF), which has made breakthroughs in diabetes, cancer and bacterial infections.

Dr Anji Reddy did his graduation in technology of pharmaceuticals and fine chemicals from the University of Bombay and his Ph D in Chemical Engineering from National Chemical Laboratories, Pune. He worked with Indian Drugs and Pharmaceuticals Limited (IDPL) in process development and production of Active Pharmaceutical Ingredients (APIs) before setting up his own enterprise.

Dr Anji Reddy's social commitment is equally important to him. A firm believer in giving back to society he has founded two not-for-profit organizations – Dr Reddy's Foundation for Human and Social Development (DRFHSD) and the Naandi Foundation.

DRFHSD identifies programmes that would make a significant difference to the quality of life of the community and assumes responsibility for them till they become self-sustaining. Two such programmes are the Child and Police (CAP) project and the Livelihood Advancement Business School (LABS) project.

CAP is aimed at identifying child workers and non-school-going children by turning them into students. The programme has provided access to education to over 4250 children in and around Hyderabad and it is estimated that over 100 schools covering 75,000 children will benefit from it over the next three years. The LABS project has helped mainstream 3000 marginalized youth from the streets and



slums to become self-supporting family people. Naandi Foundation supports the State's initiatives for sustainable development through corporate and civil society partnerships for providing better health, basic education and sustainable livelihoods to disadvantaged people.

A member of both the Board of Trade and the Prime Minister's Taskforce on pharmaceuticals and knowledge-based industries, Dr Anji Reddy is the recipient of many awards. He received the Padmashri from the Government of India for distinguished service in trade and commerce. He was given the 'Achiever of The Year' award by CHEMTECH Foundation in 2000 for pioneering the introduction of affordable medicines to the people of India. In 2001 he was nominated 'Businessman of The Year' by Business India and joined the ranks of India's most prominent business leaders.

Dr Reddy's association with our Institute began in 1995 when Dr Reddy readily agreed to support non-paying surgeries for the entire month of September, in his father's name, every year for 10 years. This was followed by his substantial contribution to our Molecular Genetics Laboratory. When Dr G N Rao introduced the then Director-Designate Prof Ravi Thomas to him, Dr Reddy remarked, "I am behind you. Don't worry about the money, just keep up the good work!" This comment was a further reaffirmation of his commitment to L V Prasad Eye Institute. Dr Reddy continues to be a major source of encouragement to our work at the Institute.

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William Beaumont Hospital, Michigan, USA  
Yayasan Penyataun Wyata Guna, Indonesia

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Handicapped, Secunderabad  
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## L V Prasad Eye Institute

L V Prasad Marg, Banjara Hills, Hyderabad - 500 034, India

Phone: 91 40 2354 8267, 2360 8262 Fax: 91 40 2354 8271

Email: [postmast@lvpei.org](mailto:postmast@lvpei.org) Web site: [www.lvpei.org](http://www.lvpei.org)