





## L V Prasad Eye Institute

Committed to excellence and equity in eye care

Activity Report

April 2009 – March 2010



Collaborating Centre for Prevention of Blindness

L V Prasad Eye Institute, a not-for-profit charitable organization, is governed by two trusts: Hyderabad Eye Institute and Hyderabad Eye Research Foundation. Donations to Hyderabad Eye Research Foundation are 175% exempt under section 35 (i) (ii) and donations made to Hyderabad Eye Institute are 50% exempt under section 80G of the Income Tax Act.

To make a donation, please email: sjbala@lypei.org or call 91 40 3061 2567.

## The year at a glance

The LVPEI pyramid of service delivery touches all levels of society, from remote rural villages to busy urban centres. From primary eye care to advanced tertiary (quaternary), we have provided eye care services to thousands of people, without compromising on quality. This year, we reached a total of 1,312,035 people including 111,287 children through these various levels of care, including almost a million (934,433) who received eye care services entirely free of cost. Of these 535,431 were covered as part of our community programs and 665,317 through our higher-level facilities. Ripples from our circle of impact on people's life and sight continue to spread beyond our campuses' and nation's boundaries.

#### Reaching the underserved - community eye health

Villages surveyed	473	
Population covered by door to door surveys	535,431	
Community screening programs	630	
Population screened	62,409	100% free
Schools covered	695	
Children screened	111,287	

Total population covered 535,431
Total children screened 111,287

(through our community programs)

These numbers do not include data from our partner centres.

#### Addressing visual impairment and referrals

Primary eye care

**63 Vision Centres** 

	Outpatient visits			101,979	100% free
Centre of Excellence 50 million population				Total	Entirely
	Sight restoration	surgeries a	and referrals		free of cost
T (1) 5 G	Secondary eye care				
Tertiary Eye Care 5 million population	17 Service Centres				
	Outpatient visits			225,197	43%
	Surgeries performed			28,603	69%
Secondary Eye Care					
500,000 – 1 million population	Completing the ci	ircle – tert	iary eye care	1	
	В	hubaneswar	Visakhapatnam	ı	
	Outpatient visits	67,695	58,331	126,026	21%
	Surgeries performed	6211	6511	12,722	37%
Primary Eye Care 50,000 population					
эо,ооо роринацоп	<b>Advanced tertiary</b>	(quaterna	ary) care - H	yderabad	
	Outpatient visits			212,115	30%
	Surgeries performed			27,787	43%
Community Eye Care	Total outpati	ent visits	665,317		43%
5,000 population	Total surgeri	es	69,112		<b>52</b> %
			and advanced tertiary	/ facilities)	

LVPEI Eye Health Pyramid



# ... and the Network grows

	In operation	Partnerships	In process
Centre of Excellence	1		2
<b>Tertiary Centres</b>	2	16 (11 National & 5 International)	1
Service Centres	8	9	3
Vision Centres	63		70

#### **Capacity building collaborations**

	In operation	<b>Partnerships</b>	In process
Technical consultancy			
(in specific areas)	6	14	7
Partner hospitals		6	
(4-year partnerships)			

### \*Providing a better quality of life – rehabilitation

Vision rehabilitation centres	3
Sight enhancement client visits (low vision)	4268
Vision rehabilitation client visits	7373
Community based rehabilitation	194

## Facilitating the Gift of Sight – eye banking

Includes community eye banks on our campuses

	Hyderabad	<b>B</b> hubaneswar	Visakhapatnam	Total
Corneas harvested	2936	136	310	3382

## \*Enhancing skills for quality eye care – continuing education

Ophthalmologists	227
Other eye care professionals	344
Participants in CME and other programs	1435

## **\*Pushing the frontiers in eye care – research**

Presentations	
International	86
National	255
Publications	108
Honors and awards	45

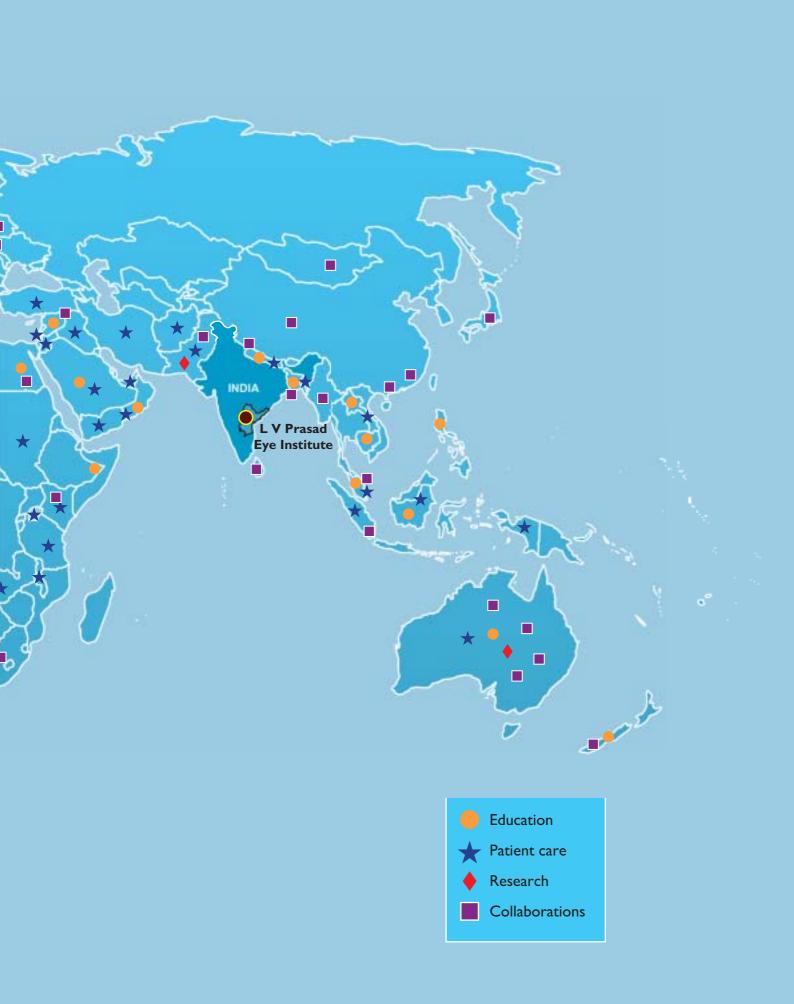
<sup>#</sup> Numbers reflect activities across the LVPEI network

## LVPEI: At home in the world



Details of institutional collaborations, page 120 LVPEI linkages in India, page 47





#### L V Prasad Eye Institute, Kallam Anji Reddy Campus, Hyderabad

## Director & Dr Kallam Anji Reddy Distinguished Chair of Ophthalmology

G Chandra Sekhar

#### **Clinical Services**

#### **Cornea & Anterior Segment**

Virender S Sangwan Prashant Garg Pravin V Krishna Somasheila Murthy R Muralidhar Varsha Rathi Mukesh Taneja Srivalli Kaza Vinay S Pillai Bhupesh Bagga Sunita Chaurasia

#### **Bausch & Lomb Contact Lens Centre**

Pravin V Krishna Varsha Rathi Preeji Shyamsunder T Shyamsunder D Srikanth

#### **Laser Refractive Surgery**

Pravin V Krishna
Prashant Garg
Somasheila Murthy
R Muralidhar
Varsha Rathi

#### **VST Centre for Glaucoma Care**

G Chandra Sekhar B L Harsha Rao Anil K Mandal Sirisha Senthil Vanita Pathak-Ray

## Smt Kanuri Santhamma Retina Vitreous Centre

Subhadra Jalali Ajit B Majji Annie Mathai Raja Narayanan Padmaja K Rani Rajeev K Reddy Ashish Sharma Jay Chhablani

#### **Uveitis & Ocular Immunology**

Virender S Sangwan Annie Mathai Somasheila Murthy Raja Narayanan Rajeev K Reddy

## Ophthalmic Plastic Surgery, Orbit, Ocular Oncology and Ocular Prosthesis

Santosh G Honavar Milind N Naik Deepa Raizada Vijay Anand P Reddy

## Jasti V Ramanamma Children's Eye Care Centre

Anil K Mandal
Santosh G Honavar
Subhadra Jalali
Ramesh Kekunnaya
Pravin V Krishna
R Muralidhar
Padmaja K Rani
Manjushree Bhate

#### Strabismus/Neuro-ophthalmology

Ramesh Kekunnaya Manjushree Bhate

#### **Comprehensive Ophthalmology**

Rohit Khanna Bhupesh Bagga

#### **Aesthetic Facial Plastic Surgery**

Milind N Naik Nitin Dhepe

#### **General Optometry**

Vijaya K Gothwal
Pallavi Abhay Agarkar
Naila Amreen Ali
T Venkata Amarnath
J Ganesh Babu
Shaik Bajibhi
G Bhuvaneswari
Tamal Chakraborty
Priyangshu Chandra
K Deepika

K Deepika P V Divya Debarun Dutta M Yashwanth Goud

P Haresh V Harikrishna Aarthi Jude S Vijay Kiran Anjul Kumar S Kartheek Kumar Preetam Kumar A Uday Kumar Tukaram Kumbar Joseph Mollah Veerendranath P Winston D Prakash Smriti Prakash Deepa Raizada Khuseeya Shareef D Srikanth V Sumanth

## Madhulatha Umesh Anesthesia Services

C Jagadishwar
PG Koshy
MS Prasad
S Ravinder
CVM Reddy
P Sreedhar
P Sriramulu

M Uma

#### **Internal Medicine**

Archana Bhargava Y Srinivasa Rao

#### Ramayamma International

**Eye Bank** *Usha Gopinathan*Prashant Garg

Prof Brien Holden Eye Research Centre Director and Distinguished Chair

of Eye Research

D Balasubramanian

#### **Jhaveri Microbiology Centre**

Savitri Sharma Das Suma Nalamada G Ashok Kumar Reddy

#### Saroja A Rao Immunology Laboratory

Savitri Sharma Das Suma Nalamada G Ashok Kumar Reddy

#### Kallam Anji Reddy Molecular Genetics Laboratory

Chitra Kannabiran Subhabrata Chakrabarti Inderjeet Kaur

#### **Ophthalmic Pathology Laboratory**

Geeta K Vemuganti

## Sudhakar & Sreekanth Ravi Stem Cell Biology Laboratory

Geeta K Vemuganti Indumathi Mariappan Virender S Sangwan

#### Visual Optics and Psychophysics Laboratory

Shrikant R Bharadwaj

Meera & L B Deshpande Centre

for Sight Enhancement &

**Dr PRK Prasad Centre for Rehabilitation** 

of Blind & Visually Impaired

Vijaya K Gothwal Beula Christy Hemalatha Arunachalam Deepak K Bagga

Rituparna Ghoshal
B Padhmavathi
Mahalakshmi

#### **Education Centre**

Director & Dr G Chandra Sekhar Distinguished Chair of Education Prashant Garg

## LVP-Zeiss International Academy of Advanced Ophthalmic Education

Srivalli Kaza

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

Coen GA de Jong Vijaya K Gothwal M Srinivas Shrikant R Bharadwaj

#### International Centre for Advancement of Rural Eye care (ICARE), Kismatpur Campus

Rohit Khanna
Sayed Imtiaz Ahmed
S Bhattacharya
S Krishnaiah
Giridhar Pyda
V Rajashekar
Gullapalli N Rao
S Sheeladevi
M Srinivas
Kovai Vilas
Jachin David Williams



#### L V Prasad Eye Institute, Bhubaneswar

Director

Taraprasad Das

**Cornea & Anterior Segment** 

Sujata Das Srikant K Sahu Sanghamitra Dash Suryasnata Rath

Glaucoma

Sanghamitra Dash

**Ophthalmic Plastic Surgery, Orbit & Oncology** 

Suryasnata Rath

Retina & Vitreous

Soumyava Basu Taraprasad Das Tapas R Padhi

Miriam Hyman Children's Eye Care Centre

Siddharth Kesarwani Sanghamitra Dash Tapas R Padhi Srikant K Sahu Suryasnata Rath Reema Helan Contact Lens & Refractive Surgery

Sujata Das Srikant K Sahu Mukesh K Singh Souvik Mandal Santanu Jana

**NTPC** Centre for Diabetic Eye Disease

Taraprasad Das Soumyava Basu Tapas R Padhi

**NTPC Eye Trauma Centre** 

Suryasnata Rath Soumyava Basu Sujata Das Tapas R Padhi

**Ocular Prosthesis** 

Suryasnata Rath Mahasweta Choudhury Bhaktiprada Sahu

**NTPC Centre for Sight Enhancement** 

Reema Helan Souvik Mandal Mahasweta Choudhury **General Optometry** 

Mukesh K Singh Souvik Mandal Mahasweta Choudhury Bhaktiprada Sahu Santanu Jana

Anesthesia Services

Debendranath Das

**Laboratory Services** 

Savitri Sharma Das Sarita Kar

drushti daan Eye Bank\*

Sujata Das Srikant K Sahu

Administration

Bikash Chandra Mohanta

Prakash Das Chhoton De Raghuram Sastry Sudipta Parida

#### L V Prasad Eye Institute, GMR Varalakshmi Campus, Visakhapatnam

Director

Merle Fernandes

**Cornea & Anterior Segment** 

Merle Fernandes Meena Lakshmipathy Sushmita G Shah

Glaucoma

P V K S Varma

**Retina & Vitreous** 

Avinash Pathengay A Srinivas

Gaurav Yogesh Shah

**Contact Lens & Refractive Surgery** 

Merle Fernandes Rekha Gunturu Meena Lakshmipathy Sushmita G Shah Ophthalmic Plastic Surgery, Orbit & Ocular Oncology

Uveitis

Avinash Pathengay

**Strabismus** 

Virender Sachdeva

Neuro-ophthalmology

Virender Sachdeva Avinash Pathengay

Nimmagadda Prasad Children's Eye

Care Centre
Merle Fernandes
Virender Sachdeva
P V K S Varma

**Bob Ohlson Centre for Sight** 

**Enhancement** Rekha Gunturu **General Optometry** 

P Anand Rekha Gunturu

**Anesthesia Services** 

Morton Anesthesia Allied Services Pvt Ltd

**Laboratory Services** 

Nagendra Kumar

Mohsin Eye Bank\* Merle Fernandes Meena Lakshmipathy Sushmita G Shah

**Administration** 

B Anjaneyulu
D Ch Lakshmi
K Lokesh
B V S Mallikariun

B V S Mallikarjun Rao Mr K Veeraswamy

#### LVPEI Network - Management

Usha Gopinathan

Associate Executive Director N

Annapurna Devi Chief Technology Officer

V Rajashekar New Projects & Development Sreedevi Penmetcha

 $New\ Programs\ \&\ International\ Liaison$ 

Sam Balasundaram Fund Raising & Donor Relations

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SBN Chary

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M Venkatesh Reddy Trust Affairs & Chairman's Office K V Subba Rao Finance & Accounts

Ghanshyam Singh
Opticals & Opticianry

\* Community eye banks on our campus

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#### Dr Gullapalli N Rao

Distinguished Chair of Eye Health L V Prasad Eye Institute, Hyderabad

#### **Members**

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Managing Director, Prasad Film Laboratories Ltd Hyderabad

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Chairman, Dr Reddy's Laboratories Ltd Hyderabad

#### Prof Palle Rama Rao

Distinguished Professor

International Advanced Research Centre for Powder Metallurgy & New Materials, Hyderabad (Former Secretary, Department of Science & Technology, Government of India)

#### Dr Sangeeta Wagh

Dr Sandeep Wagh Eye Centre Pune

(Alumni Representative)

#### Prof M Rammohan Rao

Dean Emeritus Indian School of Business

Hyderabad

#### Mr N Prasad

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#### Dr K Ravindranath

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#### Mr G Mallikarjuna Rao

Chairman, GMR Group Bengaluru

#### Mr Ravi Reddy

Chairman, THINK Capital New Jersey, USA

#### **Prof K Srinath Reddy**

President, Public Health Foundation of India New Delhi

#### Prof Seyed E Hasnain

Vice Chancellor, University of Hyderabad Hyderabad

#### Dr V Raghunathan

Chief Executive Officer, GMR Varalakshmi Foundation Hyderabad

#### Dr G Chandra Sekhar (Ex-officio)

Director

L V Prasad Eye Institute

Hyderabad

#### Dr Taraprasad Das (Ex-officio)

Director

L V Prasad Eye Institute

Bhubaneswar

#### **Hyderabad Eye Research Foundation**

#### Chair

#### Dr F C Kohli

Chairman Emeritus Tata Consultancy Services Ltd Mumbai

#### Secretary & Treasurer

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Distinguished Chair of Eye Health L V Prasad Eye Institute Hyderabad

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Director

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#### Lt Gen D Raghunath

Principal Executive
Sir Dorabji Tata Centre for Research in Tropical Medicine
Innovation Centre
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#### Mr Syamal Gupta

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#### Prof D Balasubramanian (Ex-officio)

Director – Research Hyderabad Eye Research Foundation L V Prasad Eye Institute Hyderabad

#### Dr G Chandra Sekhar (Ex-officio)

Director L V Prasad Eye Institute Hyderabad

#### Dr Taraprasad Das (Ex-officio)

L V Prasad Eye Institute Bhubaneswar



## **Foreword**

ne of the major health care concerns globally is achieving gender equity. Only a very small proportion of women living in rural communities seek health care. "Gender equity and eye health" was indeed the theme of World Sight Day 2009. This was very timely as attention to this issue is critical at this half-way point to VISION 2020: The Right to Sight global initiative. Measurable progress on this issue will only add to the success of this important global initiative. At LVPEI, we have looked at the cumulative data from our rural initiatives, that is, at our secondary care Service Centres and primary care Vision Centres. The picture is extremely gratifying: 49 percent of our outpatients and 53 percent of our surgical patients were women. Of the children 46 percent were girls. This was not an accident but the result of a well planned effort by a dedicated group of professionals based on a strong foundation of epidemiological observations. Needless to say we are pleased that this investment has yielded rich social dividends. Looking at the other dimension of this, i.e., equal representation of women on our faculty and staff, we have already established an excellent record.

The turbulence from the global economic crisis has spared us, as the patronage of communities around us and from other parts of India seeking our services continued unabated. The benefits of India's "medical tourism" boom have complemented this trend. This coupled with the success in securing competitive grants and the munificence of both our long-term and new supporters, has helped sustain our financial health. This, in turn, created an enabling environment that continued to foster creativity and implementation of the many resultant projects.

Many new frontiers were opened in patient care, education, research and community eye health, adding significantly to the quantum of work across the network. With this growth come new opportunities, certainly, but also new demands on the organization. The addition of new services, techniques and technologies at all levels of the LVPEI Eye Health pyramid has enhanced our clinical care capabilities. Simultaneously the rigorous preparation for certification by the National Accreditation Board of Hospitals (NABH) has fine tuned and streamlined many qualitative parameters. These processes have prepared us for a major scale-up over the next 2 to 3 years across all tiers of our pyramid.

The shortage of human resources of various categories to deliver eye care services continues to be a serious concern. This can be addressed only through a concerted effort in training people at all levels and upgrading the skills of the people we have. Special attention is paid to bolster the quality of faculty at all levels through creation of advanced training opportunities for existing faculty as well as the creation of new positions. We continued to be visited by some very eminent people and many participated via teleconference as part of our successful 'Global Leaders Lecture Series'. The recognition received by both



faculty and alumni bear testimony to our efforts in education. Our innovative programs in community eye health too are beginning to show results, with the first batch of the Master's in Community Eye Health graduating and taking their positions in the District Blindness Control Society in their home areas.

Our research continued to be very vibrant and, this past year, we did better and more. This is reflected in the success of securing competitive grants, publications in high impact journals, and the recognition that many in our group have received. The publication record has exceeded that of last year and compares favorably with the leading institutes of the world. Collaborations with many leading organizations in the world continue.

Many in the LVPEI family have received honors and awards. I believe that this combination of individual productivity and institutional growth augers well for the future.

We are grateful to the many friends, well wishers and supporters who showered us with their generosity, time and talent. This broadbased global family of LVP remains the foundation for our pyramid.

While much has been accomplished, a lot more needs to be done to combat the scourge of avoidable (needless) blindness in our world. LVP is fully conscious of its responsibility at multiple levels – communities around us, the state, national and global. I am happy to say that our entire team, from our Board to the newest member of our staff, is ready to face up to this challenge and contribute our small bit to the global effort.

Gullapalli N Rao

Chair, Board of Trustees

Boodaiah from Mittathamakur village of Gudur mandal walked into our secondary care Swarna Bharat Eye Centre in Nellore (Andhra Pradesh) with a bag full of ripe lemons from his garden. He asked the staff to make lime juice for the Centre's patients – as an expression of gratitude on regaining sight after a cataract surgery at the Centre. *Inset*: Boodaiah with his son Venkata Ramanaiah.

## The Year in Review

## Across the network

#### LVPEI's new tertiary centre

LVPEI's third tertiary eye care facility, the Kode Venkatadri Chowdary campus, is under development at Tadigadapa, Vijayawada. Mr Kode Satyanarayana, son of late Mr K Venkatadri Chowdary laid the foundation stone on June 3, 2009, along with his wife Mrs Satya Gnana Prasunamba and son, IPS officer Mr K Durga Prasad. A noted philanthropist Mr Satyanarayana, vice president of Kode Venkatadri Charitable Society, is chair of the Spectra group of industries.



Mr K Satyanarayana and his wife with Dr Gullaþalli N Rao

The new facility will provide comprehensive eye care services for a population of 10 to 15 million in central coastal Andhra Pradesh, based on the same principles of excellence, equity and efficiency that characterize LVPEI. It will be a referral and eye health resource center for secondary and primary eye care providers in the districts of Krishna, West Godavari, Prakasam and Guntur.

The 3-acre campus has been named after the late Mr K Venkatadari Chowdary, former Municipal Commissioner of Vijayawada. The first phase of the project is supported by the Kode Venkatadri Charitable Society; the land was donated by Spectra.

At the ceremony Dr Gullapalli N Rao, Chair, LVPEI network, said, "The Kode Venkatadri Chowdary campus is expected to complete its infrastructure and staff development by the end of 2010. By the first quarter of 2011 the center is expected to provide comprehensive eye care services, including subspecialty care of the cornea and anterior segment, glaucoma, retina, children's eye care, low vision and rehabilitation on a sustainable basis with about 50% services provided at no cost to those who cannot afford to pay. It will also develop into a training center for all levels of eye care professionals."

#### **New secondary care Service Centres**

LVPEI has broken ground for the development of a new secondary-level Service Centre in another district of Andhra Pradesh, Khammam, which will take our presence into the 17th of 23 districts in Andhra Pradesh. This center is entirely funded by a local corporation, Navabharat Ventures Ltd. The Service Centre will help develop 10 Vision Centres around it over the next 24 months.

#### Into Karnataka

LVPEI has signed a Memorandum of Understanding with a local philanthropist to develop a Village Vision Complex in Bellary, Karnataka state. It will be a high-end secondary center providing comprehensive eye care, along with a complement of 10 Vision Centres, with complete telecom and technology linkages.



#### **6 New Vision Centres**

ICARE – LVPEI established and dedicated six new Vision Centres in Prakasam district, Andhra Pradesh (August 22 to September 5, 2009). Fully equipped with the requisite infrastructure and trained Vision Technicians, the new Vision Centres (VC) bring the total to 63. Of these, 30 Vision Centres in Prakasam district of Andhra Pradesh are supported by the Lavelle Fund for the Blind, Inc., New York.

Over 3 million people (an entire district) now have access to comprehensive and high quality primary eye care through the 30 VCs linked to three secondary care Service Centres for referrals. This is the first comprehensive and largest eye care program providing primary and secondary eye care covering the entire Prakasam district, thus adding a new dimension to LVPEI's community eye health program in Andhra Pradesh. Most of the Vision Centres' physical space is provided by the local community, which is invaluable in terms of financial viability, local ownership and creating a demand for services. Local key persons participated in the opening ceremony including village presidents and Mandal development officers along with the ICARE field staff.



The newly opened Ulavapadu Vision Centre receives a tremendous response from the villagers



Dr APJ Abdul Kalam speaking at the launch of the India Consortium Project



A snapshot of the key guests on the dais

#### Primary eye care for all

Standard Chartered Bank's 'Seeing is Believing' program, working with the International Agency for Prevention of Blindness (IAPB) will set up 40 Vision Centres to provide primary eye care in rural areas with technical support from L V Prasad Eye Institute. Aravind Eye Care System (Madurai), Venu Charitable Society (Delhi), Shroff Charitable Eye Hospital (Delhi) and Shri Sadguru Seva Sangh Trust (Chitrakoot, Madhya Pradesh) will each develop 10 Vision Centres. The India Consortium launch of the program, in New Delhi on April 8, 2009, was attended by former President of India Dr APJ Abdul Kalam, Mr Jaspal Bindra (CEO Asia, Standard Chartered Bank), Mr Benedict Cheong (CEO, Temasek Foundation) and Dr Taraprasad Das (Director, LVPEI, Bhubaneswar). LVPEI's contribution to the project was richly acknowledged and the Vision Centre concept appreciated by all. LVPEI is coordinating the development and monitoring of these Vision Centres.

#### LDSC support for primary eye care

The Latter-day Saint Charities (LDSC), from Salt Lake City, Utah, USA, LVPEI's long-term partners in providing primary eye care to underserved communities in rural Andhra Pradesh, have committed support for establishing 30 more Vision Centres in Andhra Pradesh. This will take the total number of Vision Centres supported by LDSC to 38.

#### LVPEI for capacity building in Africa

An Operation Eyesight Universal team led by Ms Pat Ferguson, CEO, met Dr Gullapalli N Rao on March 4, 2010. Also in the delegation were Ms Lynda Cherry, Vice President – International Operations, Dr Boateng Wiafe, Africa Regional Director, and Mr Kashinath Bhoosnurmath, India Director. LVPEI will extend technical support to the Africa Program of OEU through capacity building of eye hospitals and training of eye care professionals.



Mr Bill and Mrs Karen Laduke of LDSC present a check for the first instalment to Dr G Chandra Sekhar, Director, LVPEI, Hyderabad. Also seen is Sam Balasundaram, Assistant Director, Donor Relations



#### First namaste to eye care

A 10-minute film on LVPEI's Vision Centre concept was made by the Communications Department, Central Audio-Visual Unit and the International Centre for Advancement of Rural Eye care, LVPEI. The film showcases the institute's work in primary eye care delivery across rural Andhra Pradesh.

Sidam Rani, a beneficiary of LVPEI's community outreach program, regained vision after bilateral cataract surgery

#### **Extending the frontiers of Cornea Services**

Internationally renowned experts from Europe and the United States came to LVPEI in January 2010 for a workshop on osteo-odonto keratoprosthesis (OOKP), a revolutionary surgery that restores vision in patients who cannot benefit from conventional corneal transplants. The OOKP surgery, dubbed "a tooth for an eye", involves using the patient's own dental tissue as a supporting framework for a telescopic lens. LVPEI already offers a similar treatment, the Boston Keratoprosthesis (Boston KPro), which has restored vision to several patients with severe eye damage caused by chemical or fire accidents. The revolutionary OOKP technique offers patients with even more extreme corneal damage a chance of regaining vision.



Prof Giancarlo Falcinelli examines a patient during the workshop

Dr Anthony Aldave (second from right) interacts with the participants



The workshop was led by OOKP pioneer Prof. Giancarlo Falcinelli, professor of ophthalmology, Rome University and Scientifc Director, Osteo-Odonto Keratoprosthesis Foundation, Italy and Dr Anthony Aldave, Director, Cornea Service and Director, Cornea & Refractive Surgery Fellowships, Jules Stein Eye Institute, University of California, Los Angeles, USA. Prof James Aquavella, Department of Ophthalmology, University of Rochester, Rochester, USA participated through videoconference.

Earlier in the year, LVPEI surgeons used the Boston Keratoprosthesis to offer several patients with difficult corneal problems a chance at recovery of vision and better eye health. Developed by scientists and clinicians at Harvard University's Massachusetts Eye and Ear Infirmary, USA the procedure involves implanting a telescopic device (Boston Keratoprosthesis) in patients who cannot benefit from conventional corneal grafting.

Among the first patients to benefit dramatically from the implant were 4 teenagers who had lost all hope of seeing again due to firecracker injuries, acid and limestone burns, and severe allergies. After the surgery all the youngsters were excited that they could read the whole vision chart during an eye examination!

(Read more about the youth in PatientSpeak, page 40)

#### Honors and awards

**Dr Santosh G Honavar**, Associate Director and Head, Ophthalmic and Facial Plastic Surgery, Orbit and Ocular Oncology, received the prestigious Shanti Swarup Bhatnagar Prize in Medical Sciences in September 2009 for his work on retinoblastoma, the most common eye cancer in children. He heads the Ocular Oncology Team that manages retinoblastoma at L V Prasad Eye Institute, Hyderabad.

The Shanti Swarup Bhatnagar Prizes are awarded annually by the Council of Scientific and Industrial Research, Government of India, for outstanding research, applied or fundamental, in Biological, Chemical, Earth, Atmosphere, Ocean and Planetary, Engineering, Mathematical, Medical and Physical Sciences. LVPEI is the only eye institute in India with four Bhatnagar Awardees on its rolls.

**Dr Shrikant Bharadwaj**, Scientist and Associate Optometrist, was awarded the prestigious Ramalingaswami Fellowship by the Department of Biotechnology, Ministry of Science and Technology, Government of India for the year 2009-2010. He is the first eye researcher to receive the coveted award. Dr Bharadwaj has a PhD in Vision Science from the University of California – Berkeley School of Optometry, USA, and a post-doctoral fellowship from the Indiana University School of Optometry, USA. He is setting up a Visual Optics and Psychophysics Laboratory at LVPEI to study the development of vision in infants.

**Dr Gullapalli N Rao** was elected Chair of the Board of the Australia-based International Centre for Eye Care Education (ICEE) at its meeting in Sydney, Australia on April 23, 2009. ICEE is a non-governmental, not-for-profit organization working towards elimination of needless blindness in Asia, Pacific Islands, Australia, Africa and Latin America.

**Dr Gullapalli N Rao** received the AAO-Essilor Award 2009 from the American Academy of Optometry for significant and extraordinary contributions to eye care internationally. (More in Honors and Awards, page 102)

## News from the Bhubaneswar campus



Mr Prasanna Acharya (centre), Dr Taraprasad Das and Dr Sujata Das at the pediatric oncology unit

# Bhubaneswar campus launches 2 new services

On July 3, 2009, LVPEI Bhubaneswar, now an integral part of eye care in Orissa, celebrated its third anniversary, logging in 126,000 outpatient visits and performing 12,000 surgeries since its establishment. Of these 35% outpatient visits and 40% surgeries were free of cost for patients from disadvantaged sections of society.

Two significant services were launched on the occasion. Pediatric eye cancer services were added to the comprehensive care Miriam Hyman Children's Eye Care Centre (MHCECC), which caters to over 5 lakh children across Orissa and the neighboring states, regardless of their ability to pay. The eye cancer unit will adopt a multimodal approach to treat eye cancer in children which, if detected early, enables doctors to save both the eye and the life of a child. The facility will also strengthen the partnership between the Miriam Hyman Memorial Trust of London, which helped set up MHCECC at LVPEI.



Dr Taraprasad Das showing guests around the Learning Centre

A Learning Centre was inaugurated by Mr Prasanna Acharya, Minister for Health and Family Welfare, Government of Orissa. The Learning Centre will complement the educational activities of the institute, focusing on skill enhancement for postgraduate medical students and young ophthalmologists. It will develop into a leading learning center in India and the Asia-Pacific region, providing education in key areas of eye and vision sciences at all levels. The guests included Mrs Anu Garg, Commissioner cum Secretary, Health & Family Welfare, Orissa, Mr G Mathivathanan, Director, National Rural Health Mission, Orissa, Professor Amod Gupta, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh and Mr Jawed Zia, CEO, Alcon India.

#### Visit of CBR workers and volunteers

Forty-one community-based rehabilitation (CBR) workers and volunteers from various districts of Orissa visited the Institute on September 8, 2009 and toured the facilities. They learnt about the low vision and rehabilitation services provided at the Institute's NTPC Centre for Sight Enhancement and Rehabilitation. An awareness program was organized and a short film on eye donation was screened.



CBR volunteers meeting



#### **Institute Day celebrations**

The Fourth Institute Day was celebrated on January 16, 2010. Dr A P J Abdul Kalam, former President of India, and Chief Guest, arrived a day earlier. Dr Taraprasad Das, Director, LVPEI Bhubaneswar briefed him on the progress of the institute. Dr Kalam also interacted with the faculty and staff. Guest of Honor Dr S Chandrasekhar Shetty, Vice Chancellor, Sri Devraj Urs University, Kolar, Karnataka delivered the Institute Day lecture. Later the staff participated in a colourful cultural program.



Dr APJ Kalam with the faculty and staff



Mr A Ramesh Prasad, Managing Director, Prasad Production (P) Ltd., Hyderabad and son of Mr L V Prasad plants a tree at Bhubaneswar campus.



# News from the GMR Varalakshmi campus Visakhapatnam



Dr Merle Fernandes gives an update on the activities of GMR Varalakshmi campus



Dr Manav Khera and Dr Vaibhev Mittal, the first comprehensive fellows at the campus, inaugurating the 24x7 Trauma Centre

# Anniversary celebrations of GMR Varalakshmi campus

LVPEI's GMR Varalakshmi campus in Visakhapatnam turned three on July 7, 2009 with Chair, LVPEI group, Dr Gullapalli N Rao and Associate Director, Laboratory Services (LVPEI network) Dr Savitri Sharma joining in the celebrations. In line with our continuing efforts to improve patient care and education, three new ventures were started.

- The microbiology services were inaugurated by Dr Savitri Sharma, Mr K Nagendra, microbiologist and Mr G Balakrishna, one of our senior-most staff.
- A 24-hour trauma and emergency room and the LVPEl-Alcon Surgical Education Centre were inaugurated by fellows Dr Vaibhev Mittal and Dr Manav Khera.

The celebrations continued into the evening with high-energy music and dance performances by the institute staff.



Dr Vaibhev Mittal and Dr Thu Pham, phacoemulsification trainee from USA, practising in the new Wet Lab

#### **World Diabetes Day**

LVPEI commemorated World Diabetes Day on November 14, 2009 as part of its ongoing World Diabetes Foundation (WDF) program in Prakasam district (Andhra Pradesh). Earlier, on March 11, 2009 Dr APJ Abdul Kalam, former President of India, had launched the Diabetic Retinopathy Awareness Programme at the Visakhapatnam campus. In collaboration with corporate organizations and the local community, the program aims to create awareness about diabetes and encourage every diabetic patient to have regular eye examinations.

Since then over 4000 diabetic patients have undergone a comprehensive eye examination free of cost at the Visakhapatnam campus. Non-paying patients with sight-threatening diabetic retinopathy underwent laser and vitreo-retinal surgeries at no cost to them. The program is supported by Symbiosis Technologies. On World Diabetes Day Airtel sent 16 lakh SMS to its customers in coastal Andhra Pradesh advising people with diabetes to have an eye examination.



## **Annual Champalimaud Review Symposium**

The Third Annual Antonio Champalimaud Symposium was held on January 30, 2010. The Champalimaud Keynote Oration on 'Glaucoma genetics: past, present and future' was delivered by renowned ophthalmic geneticist Dr Janey L Wiggs from the Department of Ophthalmology, Harvard Medical School, Massachusetts Eye and Ear Infirmary, Boston, MA, USA. This was followed by a talk on 'Angle closure: mechanisms and issues in screening' by Dr David S Friedman from The Wilmer Eye Institute, The Johns Hopkins University School of Medicine, Baltimore, MD, USA. Dr Borja Corcostegui, Director, Instituto de Microcirugia Ocular de Barcelona, speaking through videoconferencing from Barcelona, Spain, gave an 'Update in surgical treatment of proliferative diabetic retinopathy', while Prof Brien A Holden of the Institute for Eye Research, University of New South Wales, Sydney, Australia, spoke on 'Myopia'.

The Champalimaud Translational Centre for Eye Research (C-TRACER) at LVPEI, Hyderabad, was set up in 2008 with support from the Antonio Champalimaud Foundation of Lisbon, Portugal, for translating the results of basic biological research on the human eye into the clinic.



Dr Janey L Wiggs delivers the keynote oration



Dr Gullapalli N Rao honours Dr David S Friedman



Dr Leonor Beleza, President, Champalimaud Foundation



Prof Brien A Holden

## **Endowment lectures**

#### Dr Rustom D Ranji Rotary Lecture on health inequalities

The Dr Rustom D Ranji Rotary Award and Lecture 2009, organised by LVPEI and Rotary Club of Hyderabad (District 3150) on September 11, 2009, was delivered by Prof Mala Rao, Director, Indian Institute of Public Health (an arm of the Public Health Foundation of India). Speaking on 'Tackling health inequalities, everybody's business & everybody's responsibility', she drew a connection between the individual decisions we make - personally, professionally, as institutions and as communities - and the state of a population's well-being. Drawing on diverse bodies of knowledge such as sociology, media studies, health economics and environment, she drew disturbing and profound conclusions about why we need to re-think the way we live our lives, so that we preserve not only our health, but also the health of our planet. The Rotary Club of Hyderabad supports the annual lecture in memory of Dr Rustom D Ranji, honorary ophthalmologist to the late Nizam of Hyderabad.



Prof Mala Rao being felicitated by Rotary District Governor Rtn C Suresh. Centre: Dr G Chandra Sekhar

#### Shri Pushkarlalji Tibrewala Lecture on eye donation

The Late Shri Pushkarlalji Tibrewala Public Lecture and Award was delivered by Dr Radhika Tandon, Professor of Ophthalmology, All India Institute of Medical Sciences, New Delhi on August 26, 2009. She spoke on common misconceptions about eye donation and the need to create awareness so that people with corneal blindness can see again.

The annual lecture series was initiated by industrialist Mr Om Prakash Tibrewala, former District Lion Governor and former president of the Federation of Andhra Pradesh Chambers of Commerce and Industry, in memory of his father. After the lecture, he honored same of those who had helped promote eye donation: Mr Rajeev from Chiranjeevi Eye & Blood Bank, Mr Raghuram from MOHAN (Multi Organ Harvesting Aid Network) Foundation, Lion R S Gulati, Lion Pankaj Sawla from Manav Mitra Samithi, and Mrs Kamalamma and Lion Laxmipathi Rao from Kamalamma Old Age Home. He also felicitated the Ramayamma International Eye Bank (LVPEI) team – Mrs Ashwini, Mr A Raghu, Mr T Raju, Mr Srinivas Reddy, Ms Bala



Dr Radhika Tandon makes a case for eye donation while delivering the Tibrewala Public Lecture. Mr O P Tibrewala (right) with Dr G Chandra Sekhar and Dr Usha Gopinathan

Rani, Mr G Srinivas, Mr A Arvind Kumar, Mr Ch Venkat Swamy, Mr K Srinivas, Mrs P Susan and Mr T Kishan Reddy – for the Hospital Cornea Retrieval Program, which has eliminated the waiting list for corneal transplants at LVPEI, Hyderabad. He also felicitated the senior cornea faculty who perform the cornea transplants at LVPEI.

#### Dr C Syamala Bhaskaran Endowment Lecture

Speaking on 'Asking a question: The first step of research', Dr Vishali Gupta, Associate Professor of Ophthalmology at the Postgraduate Institute of Medical Education and Research, Chandigarh, delivered the 12<sup>th</sup> Dr C Syamala Bhaskaran Endowment Lecture on October 9, 2009.

Dr C Syamala Bhaskaran, renowned pathologist and educationist, is a recipient of the Dr B C Roy Award. Dr C Bhaskaran, formerly Professor and Head, Department of Microbiology, and Vice Chancellor, NTR University of Health Sciences in Vijayawada, was a fellow and committee member of the National Academy of Medical Sciences. The annual lecture series has been initiated in honour of the Bhaskarans' generous support to the Institute.



Dr Syamala Bhaskaran presents a plaque to Dr Vishali Gupta



Dr C Bhaskaran and Dr Syamala Bhaskaran



#### Nawab Arastu Yar Jung Bahadur Memorial Lecture

The 2<sup>nd</sup> Nawab Arastu Yar Jung Bahadur Memorial Lecture was held at LVPEI on November 24, 2009. The guest speaker was Dr Andrea Araujo Zin, Assistant Researcher in the Neonatology Department of Fernandes Figueira Institute, FIOCRUZ, Rio de Janiero, Brazil who has been leading the retinopathy of prematurity (ROP) initiative in Latin America. In her talk "The challenge of preventing childhood blindness due to ROP in Latin America" she outlined the initiatives and achievements made in managing ROP in Latin American countries.

The biennial lecture is held in memory of Dr Abdul Hussain, who was conferred the title 'Nawab Arastu Yar Jung Bahadur' in 1914 by Mir Mehboob Ali Khan, the sixth Nizam of Hyderabad. Dr Abdul Hussain's youngest daughter Begum Bilkis Abid Ali and other family members were present at the lecture.



Begum Bilkis Abid Ali presents a plaque to Dr Andrea Zin

## Looking beyond the eye

➤ The Wellcome Trust-DBT India Alliance organized a lecture on 'Cancer: A Malady of Genes' by Prof Inder M Verma from the Salk Institute for Biological Studies, USA. December 7, 2009.



Seen from right: Prof Anuradha Lohia, CEO, Wellcome Trust-DBT India Alliance, Prof Inder Verma, Prof D Balasubramanian, and Dr G Chandra Sekhar



Prof Inder M Verma makes a point

> The Institute played host to a landmark global videoconference on 'Climate Change and its Impact on Women's and Children's Health', led by the Royal College of Obstetricians and Gynaecologists, London, UK (March 12, 2010). The objectives were to highlight the serious impact of climate change on the health and well-being of women and children by bringing together a global community through sophisticated communication technology, without increasing carbon footprints.

The speakers included Prof Mala Rao (Director, Indian Institute of Public Health, Hyderabad), Dr David Pencheon (Director, NHS Sustainable Development Unit, UK), Dr Monir Islam (Director, Department of Making Pregnancy Safer, World Health Organisation, Switzerland), and Professor Louis Reynolds (Professor of Paediatrics, University of Cape Town, South Africa). The speakers delivered insightful talks via videoconference, followed by questions and discussions involving audiences in Hyderabad, London, Geneva and Cape Town. The event was broadcast to a global audience, through live web streaming.



Clockwise from bottom left: Live videoconferencing from Cape Town, Geneva, and London with (inset) Dr Mala Rao and Dr Kamini Rao (India chair) in Hyderabad

## **Alumni news**

#### **Indian Ophthalmology College Education program**

L V Prasad Eye Institute, an acclaimed centre for cutting edge research and education, has trained more than 334 fellows from all over the world in various subspecialties of ophthalmology since its inception. Many LVPEI alumni are now key opinion leaders of the country, while being recognized internationally for their contribution to scientific research and educational training.

This year the LVP alumni Indian Ophthalmology College Education (IOCE) program was established to utilize the skills of these experienced clinicians, researchers and teachers to bring cutting edge ophthalmology and scientific updates to students and teachers of India's medical colleges. Alumni volunteers in different subspecialties of ophthalmology use their expertise for onsite hands-on training and skill upgradation of clinicians and postgraduate students. A notable spin-off is improved eye care to the common man who visits these medical colleges.

The first onsite IOCE program was conducted in January 2010 – the Regional Institute of Ophthalmology (RIO), Guwahati Medical College, Guwahati, Assam was the first college to avail this opportunity.



The Indian Ophthalmology College Education program being inaugurated in the presence of (from left) Dr Gullapalli N Rao, Prof Munin Deka, Dr Taraprasad Das and Prof Chiranjib Kumar Barua



Dr Subhadra Jalali and Dr Nazimul Hussain with the students

The program inaugural on January 25, 2010, was graced by Dr Gullapalli N Rao (Chair, LVPEI), Dr Taraprasad Das (Director, LVPEI Bhubaneswar) and Dr M Deka (Principal, Guwahati Medical College). Welcoming Dr Rao, Prof C K Barua, Director, RIO said he looked forward to more training and capacity building collaborations with LVPEI. Dr Rao spoke of LVPEI's educational initiatives and the role of its alumni association. Dr Das raised the issue of retinal blindness in developing nations, the risk factors and its prevention. Dr Nazimul Hussain, IOCE Program Director, LVPEI alumnus and former faculty spoke of the IOCE program, its objectives and future directions. Dr Deka was grateful that distinguished faculty from the LVPEI alumni association had extended assistance in training to RIO.

The first IOCE program visiting faculty was Dr Subhadra Jalali, senior retina alumnus (January 26-29, 2010). The training comprised didactic lectures, practical demonstrations and surgery and was well appreciated by the faculty and postgraduate students.

#### A few comments from the postgraduate students

**Dr Punam Kumari**: We found the program informative and helpful. It gave us an opportunity to learn so many things related to our field within a short span of time.

Rohit Ramesh Modi: The onsite training was a great learning experience. Your (the faculty's) energy was infectious. Our attitude towards ophthalmology has changed. It is said there are two kinds of genius in the world. With the first group we know we can achieve what they have achieved by more hard work and dedication. But the second group is of magicians. It is difficult to understand how these people work. LVPEI belongs to the second group. There is an old Chinese saying... If you have vision for one year cultivate flowers, if you have vision for 10 years cultivate trees and if you have vision for eternity cultivate people. Your institute and alumni have that vision. Thanks a lot for showing us how much fun ophthalmology is.





Dr Sunil Singh, alumnus, presents the LVPEI alumni badge to Prof Amod Gupta, guest of honour at the meeting

Faculty and alumni catch up at a dinner on the Institute lawns

#### **Annual alumni meeting**

The 2009 LVPEI alumni meeting was a great success (May 31 – June 1, 2009). The scientific program was followed by a dinner marked by bonhomie, song and dance, thoroughly enjoyed by the alumni, fellows and faculty of LVPEI. The guest of honour Prof Amod Gupta, Head, Ophthalmology, Postgraduate Institute of Medical Education and Research, Chandigarh delivered an inspiring lecture. Other highlights were the launch of the "LVP Alumni" pin and the alumni's contribution towards the "LVP Silver Jubilee Celebration 2012" fund. The meeting also recognized the fact that alumni from various parts of India and abroad continue to utilize LVPEI's resources, such as corneal tissues, amniotic membranes, tissue glue and polyhexamethylene biguanide (PHMB).

#### **Alumni highlights**

- A thank you note from **Ekta Aggarwal**: "I am in New Zealand doing an oculoplastics fellowship at University of Auckland... This is a wonderful fellowship program and I am trying to make best of it. Just wanted to mention how much I am thankful to LVPEI for my training, the way it is recognized everywhere in all the parts of the world. My Prof complimented me saying LVPEI training is considered at par with any international training."
- ☼ Dr Mayur R Moreker, Consultant, Cornea, Cataract & Comprehensive Ophthalmology at the Taparia Institute of Ophthalmology, Bombay Hospital & Medical Research Centre, Mumbai, won the Best Paper award in the Inflammation Section at the 2010 annual conference of the All India Ophthalmological Society at Kolkata (January 2010). He was a Comprehensive Ophthalmology fellow at LVPEI from 2005-2008.

- ☼ LVPEI alumnus Dr K V Ravi Kumar's paper A stitch in time saves nine successful management of optic neuritis received the Best Paper Award at Vaisakhi Eye Con-2009, Andhra Pradesh State Ophthalmological Society's annual conference at Visakhapatnam (October 2009). The paper was based on a patient treated at his hospital free of cost who subsequently regained most of her lost vision. A phaco and glaucoma specialist, Dr Ravi Kumar is consultant ophthalmologist at the Manipal Superspeciality Hospital.
- Ravi Chandra Bakaraju, an alumnus of LVPEI's Bausch and Lomb School of Optometry (BLSO), received one of the 12 prestigious William C Ezell Fellowships of the American Academy of Optometry (AAO) for 2009-2010. After his BS in Optometry in 2006, he began a PhD at the University of New South Wales, Sydney. Earlier in the year, Nagaraju Kemidi, BS Optometry Batch 2001 received a doctor's degree in optometry (OD) from the New England School of Optometry, Boston, USA.



Behind every slit lamp is an eye.

Every eye is a window to a mind.

And behind every mind is a thinking, feeling, knowing individual.

Patient care is about people. And their lives.



# **Patient Care Services**

The year has been one of consolidation and growth in patient care services, with new services introduced at Visakhapatnam and Bhubaneswar campuses, with Kallam Anji Reddy campus, Hyderabad taking many measures to improve patient comfort and efficiency of systems. LVPEI's contribution to eye banking continues to grow, with the three campuses together recording the highest-ever number of corneal transplants this year. Our own learning has contributed to the setting of new standards in eye care nationally – in eye banking, retinopathy of prematurity, eye cancer, low vision – bringing us recognition, no doubt, but also a great deal of satisfaction!



#### Patient care

#### **Tertiary & Advanced tertiary care**

Communication	Outpatient visits			Surgical procedures		
Campus	Paying	Non-paying	Total	Paying	Non-paying	Total
Kallam Anji Reddy Campus, Hyderabad	149,256	62,859	212,115	15,961	11,826	27,787
Bhubaneswar Campus, Bhubaneswar	54,065	13,630	67,695	4175	2036	6211
GMR Varalakshmi Campus, Visakhapatnam	44,872	13,459	58,331	3852	2659	6511
Total	248,193	89,948	338,141	23,988	16,521	40,509

#### **Break-up of surgical procedures**

Surgeries	Kallam Anji Reddy Campus, Hyderabad	Bhubaneswar	GMR Varalakshmi Campus, Visakhapatnam	Total
Cataract	10,585	2616	3017	16,218
Cornea	3482	321	716	4519
Corneal transplants	1231	112	215	1558
Glaucoma	997	165	178	1340
Retina Vitreous	6571	1912	620	9103
Squint	574	55	179	808
Plastic	3871	743	403	5017
LASIK	476	104	220	800
Others	_	183	963	1146
Total	27,787	6211	6511	40,509

These numbers are included in the patient care summary above.

A total of 1558 corneal transplantions were done at LVPEI's three campuses. This is the highest ever done at LVPEI, and indeed, one of the highest in the world.



Right to eye care – for all of us, boys and girls!

#### World Sight Day 2009 commemorated

The Institute commemorated World Sight Day on October 8, 2009, with support from Fullerton India Credit Company Limited (FICCL) and the British Library. A community screening program and eye health awareness meeting was organised at the venue of the Institute's Comprehensive Eye Health Project in an urban slum of Hyderabad. A talk on 'Eye health awareness' was given and schoolchildren sang songs on eye health.

Dr Srivalli Kaza, Consultant, LVPEI, gave a talk on this year's global theme of World Sight Day 'Gender and Eye Health – equal access to care' at the British Library, which was followed by a vision screening program.



An elderly woman is accompanied by her grandchildren for an eye examination on World Sight Day







#### Children's Eye Care

	Outpatient visits			Surgical procedures		
Centre	Paying	Non-paying	Total	Paying	Non-paying	Total
Jasti V Ramanamma Children's Eye Care Centre, Hyderabad	23,407	11,147	34,554	1995	1771	3766
Miriam Hyman Children's Eye Care Centre, Bhubaneswar	6996	1888	8884	257	227	484
Nimmagadda Prasad Children's Eye Care Centre, Visakhapatnam	6026	1557	7583	179	184	363
Total	36,429	14,592	51,021	2431	2182	4613

These numbers are included in the patient care summary on the earlier page.

#### Retinopathy of Prematurity (ROP) program

	Hyderabad	Bhubaneswar
Babies screened	863 (481 at LVPEI and 382 in NICU*)	186
Laser sessions	158 (26 in NICU)	19
Pediatric retina surgeries	452	123
ROP surgeries	74	2

<sup>\*</sup>NICU - Neo-natal Intensive Care Unit

A low number of ROP surgeries indicates the success of our screening and laser program. However, this year's 74 ROP surgeries were performed mostly for babies referred to us from outside our ROP program, which is a recognition for our established ROP and pediatric retina surgery centre. Coordinated teamwork by pediatric anesthetists, neonatologists, internists and nursing staff have helped us achieve this status.

#### **National ROP guidelines**

Dr Subhadra Jalali was invited to join the National ROP Guidelines Panel by the National Neonatology Forum, India. A draft of the proposed 'Indian National ROP guidelines' was presented to office-bearers of the All India Ophthalmological Society (AIOS) and the National Neonatology forum (NNF) for debate, discussion and finalization.





A section of the audience with all levels of staff mingling



The dance by child clients of the Rehabilitation Centres stole many hearts

#### **Patient Care Day**

The anniversary celebrations of Patient Care Day at LVPEI's Kallam Anji Reddy campus, Hyderabad, were held on June I, 2009, with the staff taking a break from routine patient care. Dr G Chandra Sekhar, Director, spoke on the significance of Patient Care Day. This was followed by a skit 'Modern Ramayana' by ophthalmic nursing assistants and talks in a lighter vein, by staff members on a 'Typical day at LVPEI'. Among the speakers were Mr Shive Shankar, administrator, security services; Mr Yousuf Arafat, associate administrator, patient care services; Mr Avinash, supervisor, medical records department; Mr Siva Rama Sharma, system administrator, information systems department; Mr Ravinder, junior administrator, housekeeping services; and Mr Vamsi Krishna, technician, clinical biochemistry. The program ended with a spirited cultural program. Performances by child clients of the Vision Rehabilitation Centres stole the show.

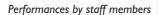


Renewing the pledge of service

#### **Nurses Day celebrated**

Nurses Day was celebrated by the LVPEI family at the Kallam Anji Reddy campus (Hyderabad) on Florence Nightingale's birthday May 12, 2009. After lighting a lamp, all the nurses took a pledge of service. Dr Usha Gopinathan, Associate Executive Director, and cornea faculty Dr Somasheila Murthy urged the nurses to show compassion and care towards patients, regardless of religion, race, age, gender and economic background.

Later, the nursing trainees and nurses danced, sang and performed skits. The evening ended with the distribution of prizes.





## Retinoblastoma - They Live and See!

For someone who wanted to go into surgery because it seemed like a "clean specialty" that offered a definitive treatment to certain medical problems, Santosh Honavar, Head, Ophthalmic Plastic Surgery, Orbit & Ocular Oncology Services, couldn't be in a more "indefinite" space of work. Retinoblastoma, a cancer of the eye, is not a very common condition, but its significance lies in the fact that it affects mostly children, and in countries like India, is often left undiagnosed – and hence untreated – for too long, becoming a cause for ocular morbidity and ultimately mortality. "I was shocked by the numbers when I began working in this area," he says, "75% of the children presented with very advanced tumours, and 50% of them would die, when we applied the existing treatment protocol."

"There was no concerted plan to deal with retinoblastoma; we were all just managing the disease, and not many oncologists were familiar with the entity," he notes. So after completing his senior residency at the All India Institute of Medical Sciences in 1995, Honavar joined L V Prasad Eye Institute, bringing with him his twin interests – retinoblastoma and oculoplasty – and set about creating a home for his passion.

"Oncologists focus on treating the cancer, not necessarily in saving the organ or its function," explains Honavar. "As an ophthalmologist practising ocular oncology, my focus was on saving both." Using data retrospectively from all the retinoblastoma cases the Institute had dealt with, Honavar and his team — itinerant fellows, colleagues in LVPEI's Ramayamma Children's Eye Care Centre, pathology laboratory, and statisticians — searched, Holmes-like, for clues that would lead them to understand the risk factors that led to tumour progression.

"What followed was an intense period of dialogue - internally, among clinicians and pathologists, externally,

with specialist retinoblastoma groups — and we began to see that advanced retinoblastoma had to be treated differently, unlike the protocols commonly used in the west, where the cases presented much more early." The new protocols for advanced retinoblastoma now help salvage eyes and vision.

"The question we are asking is, what makes it more likely for a cancer cell to spread from one part of the body (in this case, the eye) to another? What can we do to control that spread?" Honavar and his team then came up with a pre-emptive adjuvant therapy, where they instituted a treatment regimen based on their understanding of risk factors gained from the retrospective study.

"We have seen substantial reduction in the numbers of children who die, as a direct consequence of this adjuvant therapy," says Honavar.

"The climate at LVPEI is particularly conducive to this sort of innovation in patient care," says Honavar. The institute's structure, combining basic and clinical research with an active public health and epidemiology program, facilitates a sharing of perspectives, he adds. "This has led to a higher level of internal referral, with more children being identified at a stage when they can be helped – to save their vision, and their life."

The work on retinoblastoma led to Santosh Honavar's being named as one of the winners of India's most prestigious award for young scientists — the Shanti Swaroop Bhatnagar Award for 2009. But it has had other, more important consequences; it has led to the consolidation of a distinct subspecialty in eye care, ocular oncology, with students completing their training here, at the Ramayamma Children's Eye Care Centre, and moving on to take this approach to care to other centres in India and elsewhere.

#### Ocular Oncology Centre at L V Prasad Eye Institute

India's first Ocular Oncology Centre was set up at LVPEI in 2000. On January 24, 2004, Sightsavers supported the establishment of a Children's Eye Cancer Centre, which addresses the management needs of children affected by cancers of the eye and related structures.

In 2004, Dr Parin Vakharia set up a Corpus Fund for treatment of children with eye cancer, in memory of the late Ms Olive Swoboda. The fund has helped provide quality tertiary cancer care to hundreds of underprivileged children free of charge. During the year 2347procedures were performed on children with retinoblastoma, of which I296 (over 55%) were absolutely free of cost. The procedures performed included examination under anesthesia, laser transpupillary thermotherapy and cryotherapy, as well as hospital-based chemotherapy, and surgical procedures like enucleation with orbital implant and plaque brachytherapy.

Support for treatment of children with retinoblastoma also came from:

- Alcon, which gifted carry bags with cartoon characters
- Ar Sai Prasad from Prasad Film Laboratory helped convert public service awareness videos to film print reels
- Goonj, New Delhi, delivered clothes and toys
- Teachers of Geetanjali School distributed chocolates
- Penita Sen, author, New Delhi, donated her children's books to the library in the chemotherapy ward

#### **Vision Rehabilitation Centres**



The children show their talents in music and dance

#### **Integrated summer program**

The annual 'Integrated summer program' for visually challenged children and their sighted siblings was conducted May 18-30, 2009. The 35 children included 25 differently abled and 10 sighted siblings. They participated enthusiastically in activities such as yoga, games, music, dance, and elocution, parent-children compatibility testing, story telling and field trips. The children are very much at home at the Institute; the program helps enhance their confidence and develop their personality.

#### **Centres for Sight Enhancement (Low vision rehabilitation)**

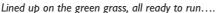
Sight Enhancement	New client visits	Follow-up client visits	Total	Low vision devices prescribed
Meera & L B Deshpande Centre, Hyderabad	2133	1441	3574	2145
NTPC Centre, Bhubaneswar	204	14	218	175
Bob Ohlson Centre, Visakhapatnam	362	114	476	879
Total	2699	1569	4268	3187

#### Rehabilitation of the Blind & Visually Impaired

Rehabilitation Services	Dr PRK Prasad Centre Hyderabad	Bhubaneswar	Visakhapatnam	Total			
New client visits	2733	548	799	4080			
Follow-up client visits	2802	250	241	3293			
Service Delivery							
Special skills training	1086	554	351	1991			
Instruction in use of  - Assistive devices (computers)  - Low vision devices	1550	256	704	2510			
Environmental modification	1968	760	570	3298			
Educational guidance	760	415	385	1560			
Vocational guidance	280	353	465	1098			
Supportive guidance	2140	342	186	2668			
Referral to other services	133	326	302	761			

Note: Some clients were prescribed more than one device and trained in multiple living skills







Mr Sheshaiah, a volunteer, distributes prizes to the children

#### Fun Camp 2009

The 'Fun Camp 2009' for children with visual impairment was held on November 26, 2009, at a popular entertainment park. The 275 participants included 125 visually challenged children, 150 sighted siblings and family members. Group and individual games, such as memory games, water games, and theme enactment were conducted for the children according to their abilities and prizes awarded to the winners and runners-up. The camping experience provided the children an opportunity to interact with their peer group and build self-esteem, while offering the parents a platform to share their experiences with one another. Volunteers Mr Pulla Rao, Ms Neeraja, Mr Sheshaiah, and Mr TAN Murthy helped the rehabilitation team organize and coordinate the activities.



Volunteers with the staff of the Rehabilitation Centres

#### **Volunteers** meet

The annual volunteers meet, held on February 13, 2010, reviewed their contributions in vision rehabilitation activities, while planning for greater involvement. A total of 27 volunteers attended the meeting; Mr Sheshaiah, Mrs Varsha Kulkarni and Master Nitesh shared their experiences. The volunteers' commitment and selfless service were appreciated by Dr Gullapalli N Rao and Dr G Chandra Sekhar.

#### Range of high-tech assistive devices expanded

The donation of 3 closed circuit televisions (CCTVs) and a portable video magnifier from the Director, Mr S S Ng of Telesensory Pvt Ltd, Malaysia has augmented the Vision Rehabilitation Centres' range of high-tech assistive devices. Mr SS Ng and his colleagues had visited LVPEI earlier to assess the demand for these devices in India. LVPEI has signed an MoU with Telesensory Pvt Ltd and can now supply electronic low vision devices to its patients. It is particularly helpful for patients with severe vision loss who would otherwise have limited access to printed material. Patients with milder forms of vision loss can use them for higher magnification coupled with a more comfortable viewing distance, both of which are an improvement on optical low vision devices.

#### **World Braille Day**

World Braille Day was commemorated on January 4, 2010 to mark the birth anniversary of Louis Braille. The Rehabilitation Centres created awareness about Braille literacy and produced Braille calendars for the first time.

## First person

The Vision Rehabilitation Centres are privileged to have a dedicated support group of over 40 volunteers of all ages, who assist the staff in making audio tapes, doing translations and editing, organizing and conducting camps and workshops for visually impaired children, etc. Bharathi Ramineni, Varsha Kulkarni, Neena Verghese and Siddharth Singh narrate what they have gained while working with the children of LVPEI.



My association with L V Prasad's rehab department started a few years back as a volunteer. I recall with slight embarrassment my subtle feelings of superiority, initially. The feeling of superiority was because I thought I was "giving" something to the children. It did not take me long to realize that in reality, it was the other way round. I was 'receiving' rather than 'giving' The whole experience has humbled me and changed my perspective on life. It helped me calm down from inside. I became more grounded.

Seeing the "never give up" attitude of the visually challenged children and their parents, I stopped complaining about my life. I started appreciating all the good things I had and learnt not to be bogged down by the 'not so perfect' areas of my life.

I noticed another strange thing! When I tell people about a piece of jewellery or something else I have bought, there is jealousy in their eyes. But when I tell them about the work I do here, I see an unmistakable respect and interest in their

faces. They ask me more and express an interest to participate. I understood the power of good work!

The patience, friendliness and positive attitude of Beula and her team is another aspect that impressed me. In all these years, I have not seen anyone snapping or being discourteous. There is always a smile on their faces. They appreciate us wholeheartedly for every little thing we do. I love all you guys!

Instead of living room discussions and loads of sympathy, we should actually get down to action and do whatever little we can to improve the quality of lives of the people who need our support. If we help somebody today when we can, someone else will come along to help us in our time of need. This way all of us can live happily.

— Bharathi Ramineni



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My experience as a volunteer has been extremely enjoyable. I like the fact that there is an entire department dedicated solely to the rehabilitation of the visually impaired, especially children. I work as a reader with students who need help in preparing for their examinations. LVPEI facilitates a good working environment and their staff is very helpful. The department uses special software to scan books as images and convert them into text. The translated text usually needs extensive editing and volunteers like me help edit these books. The content is later converted into speech, which is wonderful – it is just like someone reading out their books to the children!

The rehabilitation department also gathers a lot of data about institutions worldwide for the disabled. They need help from volunteers to categorize the vast amounts of data collected in a database, so it is easily accessible. Such tasks can be done from the home and I like that flexibility. Working with LVPEI is a fulfilling experience, made special by the dedicated staff members.

— Varsha Kulkarni

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As one of the volunteers at the Rehabilitation Centres, I am involved mostly in recording textbooks for students preparing for various examinations. We have made a master copy of the class X textbooks so that children with vision problems can easily get copies of tapes made. I record books for undergraduate and postgraduate students and for students preparing for competitive examinations.

We also help with the collection of clothes and used audiotapes for children who cannot afford them. I have tried my best to raise funds for some of the activities of the Rehabilitation Centres. It has been a fruitful opportunity for me to serve the less privileged children at the centre.

- Neena Varghese



\*\*\* \*\*\*



A telecom engineer by profession, I began volunteering with LVPEI from 2005. I have been involved with audio book recordings, fund raising, and helping in the annual camp for the visually challenged children and their parents. It has been a rewarding experience. The staff at the VRC has been very supportive and encouraging, because of which I was able to direct my energy and efforts in the right direction.

-Siddharth Singh



## Silaba Zimba – taking rehabilitation to Zambia

"When I saw the curriculum of (LVPEI's) Low Vision and Rehabilitation program, I thought this is it! I knew I was lacking somewhere as a counselor. This program fills that gap," said Silaba Zimba Mundambo from Lusaka, Zambia. Silaba was pursuing a one-year fellowship in low vision and rehabilitation at the Dr PRK Prasad Centre for Rehabilitation of Blind & Visually Impaired, LVPEI, Hyderabad. She worked as a general nurse in the Eye Department of the University Teaching Hospital, one of Lusaka's biggest hospitals. But after completing her Diploma in Guidance, Counseling and Placement and doing a course in project management, vision rehabilitation became her main interest.

There is a dire need for trained staff in her country "especially in low vision rehabilitation," she said. She felt counseling was the only way to restore the confidence of worried patients who felt they had reached a dead-end. "Earlier, I did not know anything about rehabilitation. When patients who had lost vision came to me for counseling, I referred them to the National Council of the Blind for further management. I had no training and equipment for vision rehabilitation," she said. The LVPEI program was very different from her experience in Zambia, which revolved more around class discussions. "It is not easy being alone here! You got to think critically,

observe and you got to ask questions and, in the process, you learn more," explained Silaba.

Silaba appreciates the need to start rehabilitation at a very young age. Once home, she plans to work with low vision infants as a rehabilitation professional. "Rehabilitation is new to Zambia. I want to concentrate on children and work towards an accurate assessment of the condition of low vision infants," declared the determined young woman.

Silaba was LVPEI's first international trainee for the oneyear fellowship in vision rehabilitation. Her training was sponsored by Sightsavers International, UK.





## Looking ahead with confidence

t was in the middle of October 2005 that tragedy struck a young girl, just 22 years old. Rachuru Ramya was diagnosed with aphakia with nystagmus at LVPEI, Hyderabad. She had lost vision in both eyes due to advanced glaucoma in the right eye and phthsis bulbi in the left eye. She was referred to the Vision Rehabilitation Services and Ocular Prosthesis Department and given a customized prosthesis for her left eye for better cosmesis.

Her mother brought her to LVPEI Visakhapatnam for rehabilitation services. She had difficulty performing her daily tasks and moving about independently, and was unable to work on the computer. She was studying M Com and was counseled and motivated to continue her education. The Rehabilitation team also helped her to obtain a medical certificate and a railway concession certificate. She was trained in JAWS, the special computer software for visually challenged persons. Ramya was also given orientation and mobility training, such as how to use a cane, and taught protective and search techniques so she could be independent both indoors and outdoors. She was motivated to undergo home management training for independent household work and counseled about other modes of education.

Ramya successfully completed her M.Com and scored 70%. She was depressed about not getting a job. The Rehabilitation Centre provided her information on government positions for visually challenged women at Visakhapatnam. Ramya qualified for the junior assistant's job. She and her family are very thankful to LVPEI for securing her future.



# **Eye Banking**

	Corneas collected			
	Motivated	Volunteered	Affiliate centres*	Total
Ramayamma International Eye Bank, Hyderabad	1023	556	1357	2936
drushti daan Eye Bank, Bhubaneswar	108	28	-	136
Mohsin Eye Bank, Visakhapatnam	74	157	79	310

	Used for training & research	Sent to surgeons outside LVPEI	Sent to other LVPEI campuses	
Ramayamma International Eye Bank, Hyderabad	1169	285	147	
drushti daan Eye Bank, Bhubaneswar	43	0	0	
Mohsin Eye Bank, Visakhapatnam	87	84	31	

Community eye banks on our campus

#### RIEB - the "Global Centre of Excellence"

The Ramayamma International Eye Bank (RIEB) of LVPEI was the first eye bank to be established in Asia with international standards. It has continued its journey of excellence in eye banking offering training programs and setting quality standards in eye banks within India and other developing countries.

Recently, it formalized its partnership with SightLife in March 2010, with a five-year Memorandum of Understanding, recognizing RIEB as a "Global Centre of Excellence." The agreement formalizes a long-term relationship between RIEB and SightLife, one of the world's leading eye banks, based in Seattle, Washington, USA. The relationship started 12 years earlier when SightLife CEO Mr Monty Montoya and Vice-Chairman Dr Paul Dubord committed to provide RIEB technical consulting. SightLife and RIEB are partnering in several key areas to take RIEB and Indian eye banking to the next level. A global eye bank management system will be beta tested at RIEB. World-class curriculum and training modules to support the Centre's development of professional eye bank staff have been developed and piloted, and more are under way. Leadership development programs will help develop eye bank leaders both at RIEB and across India.

RIEB gratefully acknowledges the significant contribution made through SightLife by Tim Schottman, Senior VP, Jeremy Shuman, Director, and Michelle Chamberlain, Leadership Development Manager. SightLife's Global Centre of Excellence designation is in recognition of RIEB's high-level of performance, training capabilities, and leadership role in expanding access to high quality cornea tissue in India. We are excited to partner with SightLife in the mission to eliminate treatable corneal blindness!



Mr Kevin Ross, Dr Gullapalli N Rao, MrTim Schottman, Dr Usha Gopinathan, and Mr Jeremy Shuman

#### SightLife team visits LVPEI

Mr Tim Schottman, Senior Vice President, SightLife, Seattle, USA; Mr Jeremy Shuman, Director, SightLife global programs, and Mr Kevin Ross, CEO, MidWest Eye Banks (SightLife global partner) visited LVPEI between October 5 and 17, 2009, as part of their global initiative to support the development of eye banks. The programs included study of best eye bank practices at the Ramayamma International Eye Bank, as well as a strategic meeting with the Eye Bank Association of India governing body along with Dr AS Rathore from the Government of India and Dr G V Rao from ORBIS India that allowed a collaborative working session sharing common plans and action steps.

<sup>\*</sup> RIEB affiliate centres at Nidadavolu, Tanuku, Suryapet & Madanapalle and other eye collection centers



A woman signs an eye donation pledge

#### Give the Gift of Sight - National Eye Donation Fortnight

The Ramayamma International Eye Bank at LVPEI, Hyderabad observed the 24th National Eye Donation fortnight (August 25 – September 8, 2009) with a multi-faceted public awareness drive. Information kiosks were set up at the Institute and at the city's multispecialty hospitals such as Yashoda Hospital, Nizam's Institute of Medical Sciences and CARE. Trained grief counselors distributed pledge forms and pamphlets and slides on eye donation were shown at the city's cinema halls.

On August 26, 2009 the staff of drushti daan eye bank on LVPEI's Bhubaneswar campus gave a talk to the students and faculty of Xavier's Institute of Management, Bhubaneswar. Two eye screening camps were conducted in association with the Lions Club and Indian Oil Corporation at Cuttack and Sisupalgarh (August 30 - September 1).

On September 6, 2009 an inter-school painting competition was held in which children from 15 schools participated. Though the eye donation theme was challenging, the children expressed their thoughts in wonderfully original ways through their paintings.

On September 7, 2009 a workshop on 'Networking between eye collection centres, eye banks and Government' was organized jointly by drushti daan and the State Ophthalmic Cell, Government of Orissa. Health Secretary Smt Anu Garg was the Chief Guest and Dr P Rajguru was the Guest of Honor. The workshop participants included heads of ophthalmology from medical colleges, District Program Managers of the District Blindness Control Society, senior ophthalmologists from district hospitals, representatives of eye banks across Orissa and NGOs working in the field of eye care.

Mohsin Eye Bank, a community eye bank on the Visakhapatnam campus planned a range of eye donation awareness activities, including quizzes, audiovisual programs, radio talks, rallies and setting up of information kiosks at public places and colleges. The activities were organized by VEBART Trust, with support from the Lions Club and Vasavi Club.



Children enthusiastically express their thoughts and ideas through colour



Film actor Anubhav with an award winner

#### We are grateful to our network of affiliates who contributed to the cornea collection

Akbar Eye Hospital, Anantapur (8); Badam Balakrishna Eye Bank, Kakinada (51); Chiranjeevi Eye Bank, Hyderabad (53); District Blindness Control Society, Nalgonda (3); Dhanvantari Eye Donation Center, Tenali (36); District Hospital, Janagaon (29); Govt. General Hospital, Guntur (6); Govt. General Hospital, Anantapur (4); Jananananda Eye bank, Bhimavaram (18); Kamineni Institute of Medical Sciences, Narketpally (14); Lions Club of Bejjanki, Karimnagar (12); Lions Club of Cherial, Cherial (4); Lions Club of Godavarikhani, Godavarikhani (2); Lions club of Karimnagar, Karimnagar (195); Lions Club of Kesamudram, Kesamudram (4); Lions Club of Mahabubabad, Mahabubabad (52); Lions Club of Mancherial, Mancherial (10); Lions Club of Orugallu, Warangal (2); Lions Club of Palakol, Palakol (30); Lions Club of Ramagundam, Ramagundam (4); Lions Club of Suryapet Eye Hospital, Suryapet (52); Lions Club of Thorrur, Thorrur (16); Lions Club of Vemulavada, Vemulavada (20); Lions Diamond Club Nizamabad, Nizamabad (2); Lions Dundoo Eye Hospital, Secunderabad (2); Lions Eye Hospital, Bodhan (4); Lions

Eye Hospital, Nizamabad (2); M Ramreddy Lions Eye Hospital, Mahabubnagar (2); Modern Eye Hospital, Nellore (151); Mohsin Eye Bank, Visakhapatnam (31); MVR Eye Center, Tanuku (18); Nayan Eye Care, Nandyal (2); Pavani Eye Hospital, Jagityal (6); Pushpagiri Eye Institute, Secunderabad (18); Rajiv Gandhi Superspecialty Hospital, Raichur (4); Regional Eye Hospital, Warangal (66); Regional Eye Hospital, Kurnool (2); Rotary Club of Vuyyur, Vuyyur (10); Sadasaya Eye Foundation, Ramagundam (6); Sadhuram Eye Hospital, Hyderabad (24); Shri KVB Reddy IRCS Eye Bank, Kurnool (42); Siloam Eye Hospital, Madanapalle (4); Smt. R.R. Lions Eye Hospital, Nidadavole (154); Sneha Seva Samiti, Proddutur (30); Sreelatha Modern Eye Hospital, Chittoor (2); Sudarsani Eye Hospital, Guntur (26); Surya Swatchanda Seva Samiti, Mahabubabad (4); SVRR Govt. General Hospital, Tirupati (16); Swapna Nursing Home, Guntakal (4); The Khammam Eye Bank, Khammam (58); Vasavi Club of Sircilla, Sircilla (10); Yanam Eye bank, Yanam (32).



# **Product Development**

#### Mc Carey Kaufman's medium for corneal preservation

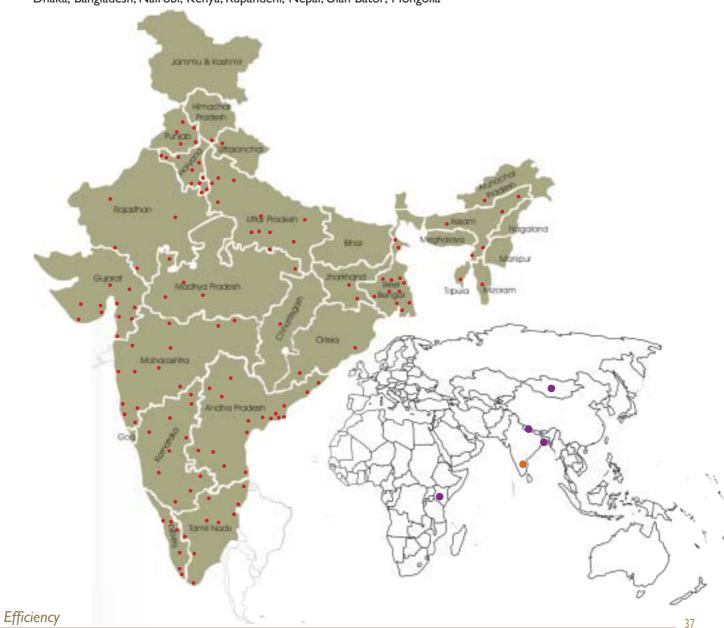
The Ramayamma International Eye Bank, LVPEI, Hyderabad, produced 19,251 vials of the Mc Carey Kaufman (MK) medium during the year. We supplied 19,621 vials of the MK medium to 239 national eye banks and 4 international eye banks.

#### **National**

Agartala, Agra, Ahmedabad, Aizawl, Aligarh, Ambala, Anand, Angamally, Asansol, Bagalkot, Bengaluru, Bareilly, Baroda, Basirhat, Bathinda, Bhavnagar, Bhimavaram, Bhopal, Bhubaneswar, Chandigarh, Chennai, Chitrakoot, Coimbatore, D.Dinazpur, Dahod, Dehradun, Dibrugarh, Durgapur, Erode, Gannavaram, Gobrapota, Gorakhpur, Gulbarga, Guntur, Gurgaon, Guwahati, Haldia, Hissar, Hospet, Hubli, Hyderabad, Indore, Itanagar, Jaipur, Jalandhar, Jalgaon, Jalna, Jamshedpur, Jhagadia, Jodhpur, Jorhat, Kakinada, Kanpur, Karad, Karnal, Katwa, Kolar, Kolhapur, Kolkata, Kottayam, Kozhikode, Kurnool, Lucknow, Ludhiana, Madanapalle, Madurai, Manipal, Meerut, Miraj, Mirzapur, Moradabad, Mumbai, Mysore, Nagercoil, Nagpur, Nalgonda, Narayangaon, Narketpally, Nashik, Navasari, Neemuch, Nellore, New Delhi, Nidadavole, Noida, Palakkad, Palakol, Pammal, Panaji, Panvel, Patiala, Patna, Perintalmana, Pondicherry, Port Blair, Proddatur, Pune, Raichur, Raiganj, Raipur, Rajkot, Ranchi, Rattanpura, Repalle, Rohtak, Salem, Sangli, Serampore, Sevagram, Shapur, Shimoga, Siliguri, Sirohi, Sirsa, Sohana, Solapur, Sriganganagar, Surat, Suryapet, Tanuku, Tenali, Thuba, Tirunelveli, Tirupati, Tiruchirapalli, Thiruvananthapuram, Udaipur, Ujjain, Vadodara, Varanasi, Vellore, Veraval, Vijayawada, Visakhapatnam, Vizianagaram, Vuyyur, Warangal, Yanam

#### International

Dhaka, Bangladesh; Nairobi, Kenya; Rupandehi, Nepal; Ulan Bator, Mongolia





Our effort is to heal, to alleviate pain and suffering from vision loss and eye disease and to positively impact people's lives. The impact of our work is best expressed in our patients' own words.



# **Patientspeak**

People from all corners of the country and the world come to LVPEI seeking eye care. This year, we had the privilege of seeing 665,317 outpatients and performing 69,112 surgeries across the network.



# A new look at life with KPro

L V Prasad Eye Institute has been using donor limbal stem cells and ocular surface reconstruction to treat patients with complex corneal problems for over a decade. However, some patients with very severe ocular conditions may not achieve long-term benefits with these techniques.

A revolutionary procedure at LVPEI now offers such patients a chance at recovery of vision and better eye health. The Institute, in association with a group of scientists and clinicians from Harvard University's Massachusetts Eye and Ear Infirmary, offers the Boston Keratoprosthesis – a telescopic device implanted in eyes that do not benefit from conventional corneal grafting. The artificial corneal implant (keratoprosthesis) plays the role of a cornea, using biocompatible material that is comfortable and less vulnerable to infection, while avoiding the attendant problems posed by a donor tissue, such as lifelong need for immunosuppressants and risk of rejection.

The Boston Keratoprosthesis (Kpro) is the most commonly used artificial cornea in the United States and other parts of the developed world. Surgeons from LVPEI's three centres – Hyderabad, Bhubaneswar and Visakhapatnam – worked closely with Prof James Chodosh of Harvard University to perfect the surgical technique.

Here are some people whose lives changed significantly after undergoing the Boston KPro surgery.



September 6, 2003: a day that will haunt 19-year-old Ankeet all his life. The fervour of Ganesh Chaturthi (a popular Indian festival) was in full swing across the city of Mumbai. Persistent rain had left the firecrackers damp and they were slow to ignite. As Ankeet bent over to check a lit firecracker, it exploded in his face. His jaw and nasal bones were ripped apart, his cheek left hanging and both his eyes were damaged. He was in hospital for many long weeks surviving on liquids while doctors treated his facial injuries.

When his condition stabilized in November 2003 he came to LVPEI seeking treatment – he could barely see some light.

Doctors began by painstakingly removing gunpowder from his eyes. He underwent four corneal transplants, including a limbal stem cell transplant, which did improve his vision. He was excited that he could now read newspapers and cell phone messages.

However, the transplants did not offer a permanent solution. The Boston Keratoprosthesis promised new hope for Ankeet and his parents. The surgery took place on July 27, 2009. For him the surgery was nothing short of a miracle!

"Earlier I could read only 2 lines (of the vision chart). Now I can read even the last 2 lines," exulted a delighted Ankeet. His mother's eyes brimmed with grateful tears, "The doctor is like a god to us," she said.



Tauseef had been living with allergy and severe itching in his eye since his childhood in a small town in Uttar Pradesh, India. A permanent eye infection (Stevens Johnson Syndrome) had deprived him of the joys of life that children of his age are entitled to. Playing cricket was one of them. "I couldn't see the ball while fielding," he recalled. Limbal stem cell transplants in 2003 and 2005 at LVPEI did not help much.

The Boston Keratoprosthesis done in 2009 improved his eyesight considerably. He could see distant objects clearly. "I could read only one line on the vision chart, now I can read the whole chart." he said.



vicious acid attack on the cheerful and bubbly Arpita Sikdar had condemned her to a life of darkness. Although the acid did not cause any serious injury to her face, she lost her eyesight. She lived with extremely poor vision for 18 months, unable to pursue her studies.



Arpita and her parents made several visits to LVPEI from the state of West Bengal. The conventional

corneal grafting and limbal stem cell transplant improved her vision but only temporarily. But the Boston Keratoprosthesis changed her life dramatically. Her joy knew no bounds when she regained her vision substantially after surgery. And Arpita's parents are thrilled to see a smile on the face of their beloved daughter.

All the three youngsters were operated upon free of cost. They have become close friends and remain in touch with each other, despite thousands of miles between them.

# "LVP has given me rebirth"

It was late at night on September 12, 2008 when Kaushalendra Kumar Awasthi, a senior non-commissioned officer in the Indian Air Force, reached the Jhansi bus station to catch a bus to Banda (in the state of Uttar Pradesh, India). Suddenly, he was attacked by two men, who threw acid on his face and robbed him of his belongings and money. Most of his face was burnt and his vision lost in the horrific incident.



Mr Awasthi was treated for several months at various Military Hospitals and underwent operations in both eyes. He regained very little vision for a brief period before relapsing into a total blackout. He sought treatment at a leading hospital in Chennai, when he was advised to go to LVPEI.

Arriving on New Year Day in 2009, Mr Awasthi met Dr Virender S Sangwan, Head, Cornea and Anterior Segment, Ocular Immunology & Uveitis Services, who assured him that he would surely see again. Loss of eyesight was the second major blow in Mr Awasthi's life after the tragic death of his wife in 2005. The words of reassurance meant a great deal to him at a time when he had lost the will to live. Despite family support, bringing up two young children as a single parent was a challenge. His visual disability added to his woes, leaving him with a sense of helplessness.

After the Boston Keratoprosthesis implant, the vision in Mr Awasthi's left eye improved from zero to 6/18. He hopes a similar surgery will restore vision in the right eye in the future.

In a choked voice, Mr Awasthi narrates how, at one stage, the Army doctors considered sending him to a school for the blind to learn Braille. "LVP has given me rebirth! Everyone says that God is the supreme power, but to me my doctor is no less than God. My life has meaning again!"



From right: Dr Anthony Aldave and Prof Giancarlo Falcinelli, leaders in osteo-odonto keratoprosthesis (OOKP), with Mr Awasthi, Ankeet, Tauseef, Dr Virender Sangwan and Dr Gullapalli N Rao during a workshop and press meet held in January at LVPEI (More on page 14)



# 'Best of luck for my surgery'

ne Monday morning, my colleague called in sick. He requested me to take care of his surgeries on that day. One of these patients was 8-year-old Nivedita. I knew right away that she was special. There she was – barely 3 feet tall, sitting straight, in the preoperative area, with her childish high-pitched voice. She was not scared like the other children and had already made friends with the nurses who were smiling behind their masks!

She happily skipped into the Operating Room alongside the technician, and was most cooperative for surgery. Yes, she needed surgery. Born with a genetic defect, Nivedita had developmental cataracts in both her eyes, which had severely decreased her vision. She wanted me to perform the surgery quickly so that she could see well again and go back to school! She loved school, she said.



On the table, just before the anesthesia, she called out loudly, "Doctor!" startling all of us! I replied with trepidation, "What is the matter?" "No...I just wanted to wish you best of luck for my surgery!"

That started my friendship with little Nivedita. She came for several routine post-operative checkups, always skipping into the room, and recounting all her achievements since the last visit! Later, she underwent surgery in the left eye. Now she can see well, goes to a regular school and is one of the top students in her class. Her only problem is when her friends tease her because she is the shortest in her class. She wants to become tall like me, she says! She calls me for every festival, or to update me on her eyes, or sometimes just to wish me good night! Now she has coached her 4-year-old sister to talk to me on the phone!

Recently, when she came to the Institute for a checkup, she asked me, "Doctor aunty, can you give me the certificate? You know, the one that says handincap (handicap)? I would like to have it."

"No, Nivedita", I replied with pride, "your vision is excellent so you don't qualify for it!" "Oh..." she said with some disappointment. "If I was eligible, my father would get a discount on all my school fees, I would have liked that. Anyway, when I grow up I will earn a lot of money for him."

Somasheila Murthy Consultant, Cornea and Anterior Segment Services



# Community Eye Health & Outreach

International Centre for Advancement of Rural Eye care (ICARE)

The year saw us begin to reap the benefit of our early engagement in community level screening for diabetic eye disease in Prakasam district, with quantitative and qualitative reports indicating that we are making a difference to the level of awareness and early detection. This is just one of the ways in which our community programs are making an impact across Andhra Pradesh and elsewhere, where we continue to work on our own and closely with other organizations in strengthening or creating infrastructure, screening in schools and in the community, and bringing more and more people into the fold of the LVPEI network of eye care.





A young beneficiary of the Sight for Kids program shares his experiences

#### **News & Events**

#### Sight for Kids milestone

LVPEI's collaborative project along with Lions Club International Foundation and Johnson & Johnson completed the screening of 10 million schoolchildren across 20 countries! The Sight for Kids (SFK) Greater Hyderabad team celebrated this milestone in its efforts to eliminate avoidable blindness among children. At a felicitation program in Hyderabad on September 11, 2009, Ln Manohar Raju and Ln B R Rao appreciated LVPEI's 5-year involvement in the Sight for Kids program, especially its tertiary level eye care services.

#### **World Diabetes Day at LVPEI**

ICARE - LVPEI commemorated World Diabetes Day on November 14, 2009 at Ongole as part of its ongoing World Diabetes Foundation (WDF) program in Prakasam district of Andhra Pradesh. A workshop for people with diabetes was conducted to emphasize the importance of lifestyle changes, with a yoga demonstration and a food exhibition arranged according to traffic signal colours. Items on the red table were prohibited for people with diabetes, those on the orange table were to be eaten judiciously and those on the green table were safe. About 85 diabetic patients from 6 villages attended the workshop and formed a selfsupport group.

Two telephone companies, Airtel and Reliance Communication teamed up with the Institute to send an SMS to clients



Ms Sunitha Sapur, nutritionist, looks on as a man with diabetes talks about the disease

about free eye check-up for people with diabetes at the Hyderabad campus on November 15, 2009. Scores of people came for screening – most of them were unaware till then that unchecked diabetes could lead to vision impairment.

#### **6 New Vision Centres in Prakasam district**

This year six new Vision Centres were established and dedicated in Prakasam district, Andhra Pradesh, between August 22 and September 5, 2009. Fully equipped with the requisite infrastructure and trained Vision Technicians, the new Vision Centres (VC) bring the total to 63. Of these 30 VCs in Prakasam district of Andhra Pradesh are supported by the Lavelle Fund for the Blind, Inc., New York.

ad a gate de g

Senior citizens await their turn for an eye examination on the inaugural day of the Santanutalapdu Vision Centre

A detailed report of ICARE's activities during the year is available as a separate publication.

For a copy please write to info.hyd@lvpei.org



## **Network of Vision Centres and Service Centres**

During the year, our Village Vision Complex provided eye care services to a total of **973,894** people at the community, primary and secondary care levels.

Of these 535,431 people in 473 villages were covered through door to door community programs, which included surveys and screenings as well as people reached through our several special projects, focusing on children, people with diabetes, etc.

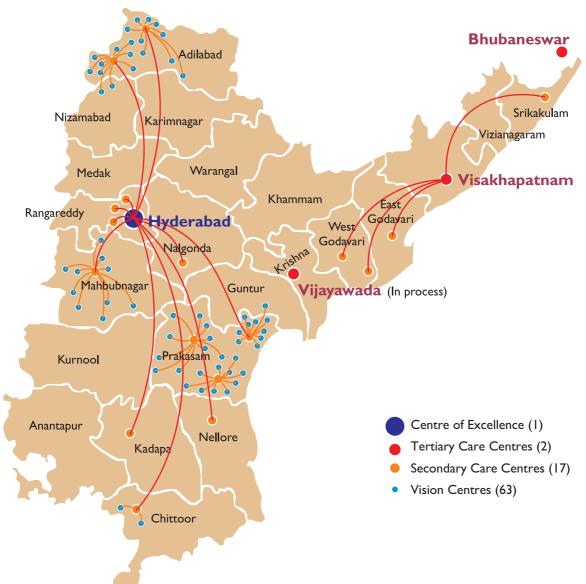
In the 695 schools covered during the year, 105,171 children were screened for eye disorders. In addition, children below 5 years of age were covered through 198 Anganwadi (crèche) programs, wherein 6116 children were screened for eye diseases.

The institute's network of 63 primary care Vision Centres across Andhra Pradesh state saw 101,979 outpatient visits, where visual impairment due to refractive errors is tackled by prescription of glasses, while persons with more complex conditions are referred for secondary care at the Service Centres.

All the above services (community, primary and school screenings) are provided entirely free of cost to the beneficiaries, i.e., **748,697** people have received quality eye care which they would otherwise have no access to entirely free of cost in one year.

Additionally, at the secondary care level, our 17 Service Centres saw 225,197 outpatient visits and performed 28,603 surgeries. Of these 43% were examined and 69% surgeries performed entirely free of cost.

Thus overall 844,485 people received free eye care through our Village Vision complex over the past year!



#### **Anniversaries**

- → 7<sup>th</sup> anniversary of Venkat Lakshmi Eye Centre, Karamchedu (3<sup>rd</sup> satellite centre) celebrated on June 7, 2009
- ↓ 4<sup>th</sup> anniversary of Seshanna Chennawar Eye Centre, Adilabad (5<sup>th</sup> satellite centre) celebrated on June 9, 2009
- <sup>↑</sup> The 2<sup>nd</sup> anniversary of Swarna Bharat Eye Centre, Venkatachalam, Nellore (6<sup>th</sup> satellite centre) was celebrated on June 25, 2009.
- ∴ Sri Kuchukalla Ramachandra Reddy Eye Centre (2<sup>nd</sup> satellite centre) celebrated its 11<sup>th</sup> anniversary on October 24, 2009.
- → ICARE celebrated its 11<sup>th</sup> anniversary on December 17, 2009.
- ♣ Bhosle Gopal Rao Patel Eye Centre, Mudhole, LVPEI's first satellite centre celebrated its 13<sup>th</sup> anniversary on December 20, 2009.

The **Sudhakar & Sreekanth Ravi Eye Centre** at Markapuram (Andhra Pradesh), the 7<sup>th</sup> secondary care Service Centre of LVPEI, celebrated its 2<sup>nd</sup> anniversary on January 3, 2010. Established with the support of Sudhakar & Sreekanth Ravi (USA) in 2008, it is part of the Prakasam District Eye Health Initiative of LVPEI.

Since its inception, the centre has seen 23,415 outpatients (51% examined free of cost) and performed 2154 surgeries – 70% of them totally free. Its 10 satellite primary care VCs offer eye care to the neighbouring villages free of cost. In two years the 10 Vision Centres have screened 23,749 patients, while 55,362 more have been screened in community care programs. Additionally, 5590 schoolchildren have been screened. Thus, over 102,500 persons around Markapuram have received eye care till date.



The eye care team at Sudhakar & Sreekanth Ravi Eye Centre

↑ The 3<sup>rd</sup> anniversary of **Siloam Eye Centre**, Madanapally, Chittoor district, was celebrated on March 11, 2010.

# **Workshops & Training Programs**

#### **Public Private Partnership**

ICARE, in collaboration with Sightsavers and the Andhra Pradesh District Blindness Control Society (DBCS), conducted the **District Program Managers Training on Cataract Management Protocol** (April 27-28, 2009). The program's main objective was to update District Program Managers (DPM) about current best practices for cataract management and formulate a common minimum clinical protocol. A total of 23 DPMs, Andhra Pradesh National Programme for Control of Blindness Joint Director, Director – AP Right to Sight Society and Sightsavers' representatives participated in the program.



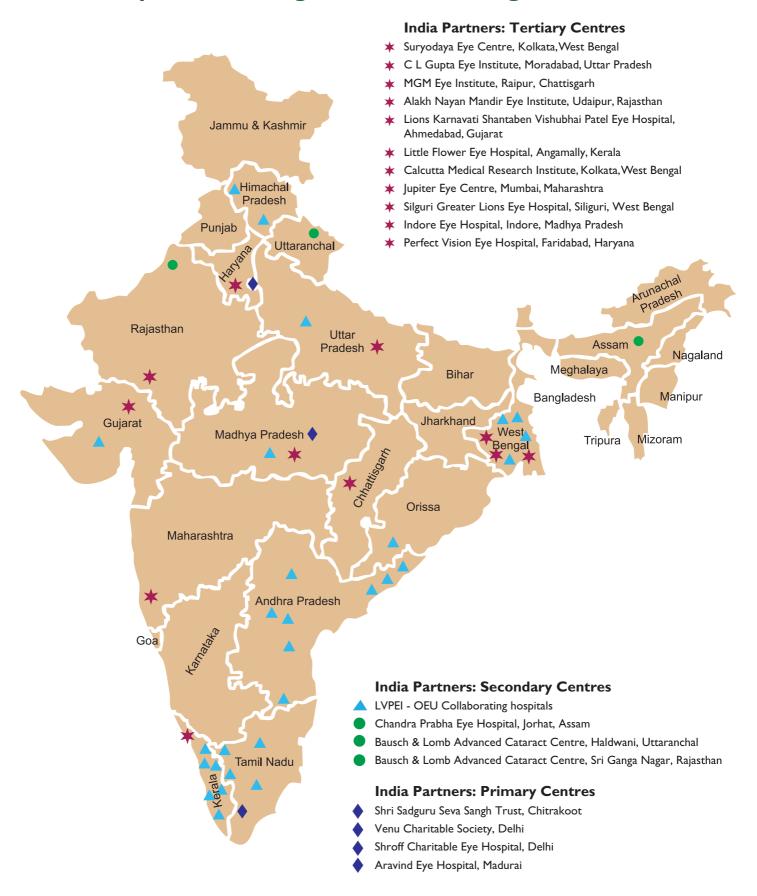
Dr Rohit Khanna, Assistant Director & Head, ICARE, addresses the district program managers

#### **ICARE** partners meet

The 9<sup>th</sup> **Satellite-Partners meeting** was held on December 24, 2009. Partners discussed the hospitals' current situation, explored the range of opportunities available, planned strategies to optimize these opportunities, and developed a framework for a joint proposal. A core group was formed with assigned roles and responsibilities to leverage opportunities to take them to the next level.



# **Accompaniment Program: Collaborating Centres**



#### **National**

#### a. Operation Eyesight Universal

LVPEI is assisting all the Eyesight Universal (OEU) partner hospitals in India in training and mentoring to represent the interests of their stakeholders more effectively and ensure greater impact in their areas of work. Regular developmental visits to all partner centres along with the OE team are undertaken by clinical and non-clinical teams. This year, the following partner's centres were visited:

- ♦ Siliguri Greater Lions Eye Hospital, Siliguri, West Bengal
- ♦ Indore Eye Hospital, Indore, Madhya Pradesh
- ♦ Thakur Sitaram Seva Kendra, Malda, West Bengal
- Assumption Eye Unit, Kanhirapuzha, Kerala
- Webster Memorial Eye Hospital, Gudalur, Tamil Nadu
- ♦ Garnett Memorial Eye Hospital, Mettupalyam, Tamil Nadu
- ♦ Thakur OEU Lions Eye Hospital, Garividi village, Sreeramnagar, Andhra Pradesh

#### b. Centre for Community Ophthalmology capacity building program

LVPEI is partnering with Seva Foundation, USA to provide eye care to the blind and visually impaired in underserved areas across the states of India. LVPEI (along with 8 other institutes globally) is part of the Centre for Community Ophthalmology (CCO) network, which is Seva's Clinton Global Initiative So One Million Eyes See Again, wherein 100 hospitals will perform an additional I million surgeries every year by 2015.

The CCO network will assist 100 hospitals to scale up their capacity to perform safe and affordable cataract surgeries and provide comprehensive eye care services to rural communities around the world. Existing facilities will be expanded and transformed into efficient self-sustaining centres, while new ones will be developed to deliver quality eye care to communities. This will be accomplished through training of all levels of staff and the development of community eye care programs.

An initial grant was released to LVPEI for needs assessment and capacity building of 13 hospitals; needs assessment visits were made to 6 hospitals in 5 states.



#### c. C L Gupta Eye Institute, Moradabad

This partner hospital, inaugurated on September 21, 2009 is a model of LVPEI's tertiary care centres, and provides comprehensive eye care to all irrespective of their socioeconomic status in western Uttar Pradesh. Till March 31, 2010 the centre had seen almost 10,000 outpatients and performed almost 1000 surgeries in all subspecialties of eye care.



#### d. Rotary Mahanagar Netralaya, Kolkata

An MoU has been signed and a monitoring visit was made to the Rotary Mahanagar Netralaya in Kolkata, West Bengal.

#### e. Alakh Nayan Mandir Eye Institute, Udaipur

Construction work is in progress; the hospital is expected to be open its doors by the first quarter of 2011.

#### f. Seeing is Believing

As part of Standard Chartered Bank's 'Seeing is Believing' project to set up 40 Vision Centres across 6 states over a period of 3 years, monitoring visits were made to evaluate the Vision Centres established by Shri Sadguru Seva Trust in Chitrakoot (Madhya Pradesh state), LAICO–Aravind Eye Care System in Theni and Madurai (Tamil Nadu), Venu Charitable Society (New Delhi) and Shroff Charitable Eye Hospital, New Delhi.



#### g. Situational analysis were carried out in the following regions:

- Development of a comprehensive eye care facility at Bellary, Karnataka
- Development of a comprehensive eye care facility at Nalgonda district, Andhra Pradesh Needs assessment visits were done and discussions are in progress for capacity building of 6 hospitals in various states of the country.

#### International

- In continuation with the initiative by the International Agency for Prevention of Blindness and the Lavelle Fund for the Blind, Inc., New York, USA to assist capacity building institutions and strengthen their ability to provide training and consultation, two needs assessment visits were made by Dr Prashant Garg to the University of Nairobi, Kenya. It is proposed to develop the University into a Centre of Excellence.
- LVPEI has signed an MoU with the Islamia Eye Hospital in Dhaka, Bangladesh, wherein consultants and senior administrators from LVPEI are working with the teams in Dhaka to develop Islamia Hospital into a Centre of Excellence and an apex centre in eye care. The MoU covers a three-year period, from 2009 2012 and is facilitated by a capacity building grant made by the Agency for the Prevention of Blindness (IAPB) and the Lavelle Fund for the Blind, Inc. New York, USA. Founded in 1960 by renowned philanthropist Mr M S Ispahani, Islamia is Bangladesh's biggest eye hospital, serving 300,000 outpatients and performing 25,000 surgical procedures annually. A few years ago, LVPEI helped develop the hospital's cornea specialty services and cornea fellowship training program.
- Technical support is being provided to Tilganga Hospital in Nepal to conduct the Rapid Assessment of Refractive Errors project.

# **Operations Research**

Name of the Project	Project Investigators	Supported by	Duration
Developing Comprehensive Models			
Village vision complex: A Comprehensive Eye Health program in Prakasam district	ICARE – LVPEI team	Ravi Brothers, USA	August 2005 to July 2010
Capacity building program to address diabetes and diabetic retinopathy in Prakasam district	Dr Ajit Babu Majji <sup>1</sup> Ms S Sheeladevi	World Diabetes Foundation, Denmark	September 2008 to August 2013
Diabetes prevention program through Child to Family Communication for change in lifestyle and health promotion in Prakasam district	Ms S Sheeladevi	World Diabetes Foundation, Denmark	August 2006 to March 2011
Eliminating Childhood Blindness			
Nimmagadda Prasad – LVPEI Children's Eye Health Initiative	Ms S Sheeladevi Mr S Bhattacharya Ms Korani Jyothi	Nimmagadda Foundation, India	July 2007 to June 2020
Pediatric Ophthalmology Learning and Training Centre (POLTC)	Dr Giridhar Pyda	ORBIS International, USA	October 2006 to March 2010
Sight for Kids	Mr Jachin D Williams	Lions Club International Foundation, USA	November 2005 to March 2011
Universal Spectacles (U–Specs)	Mr Jachin D Williams Dr Rohit Khanna	Philips Electronics, India	June 2009 to December 2009
Empowering Rural Communities			
Community Linkage for Integration of Primary Health (CLIP)	Dr Syed Imtiaz Ahmed Mr S Bhattacharya Ms Jayanthi Sagar	L V Prasad Eye Institute, India	February 2009 to February 2010
Mapping Rural Eye Care Needs			
Rapid Assessment of Refractive Errors	Mr M Srinivas Dr Jill E Keeffe <sup>2</sup> Dr Gullapalli N Rao	L V Prasad Eye Institute, India Vision CRC, Australia	2009 to 2010
Follow up of Andhra Pradesh Eye Disease Study in Andhra Pradesh: A Feasibility Study of the Revisit of the Respondents of the Baseline Study	Dr Rohit Khanna Dr Giridhar Pyda	International Centre for Eye Health, London	June 2009 to March 2010

<sup>&</sup>lt;sup>1</sup>Consultant, L V Prasad Eye Institute ♦ <sup>2</sup>Head, Population Health Unit, Centre for Eye Research Australia, The University of Melbourne



Shivudu undergoes an eye examination

Shivudu with his 'sight saver' Venkataramana

# Alert vision technician 'sights' glaucoma

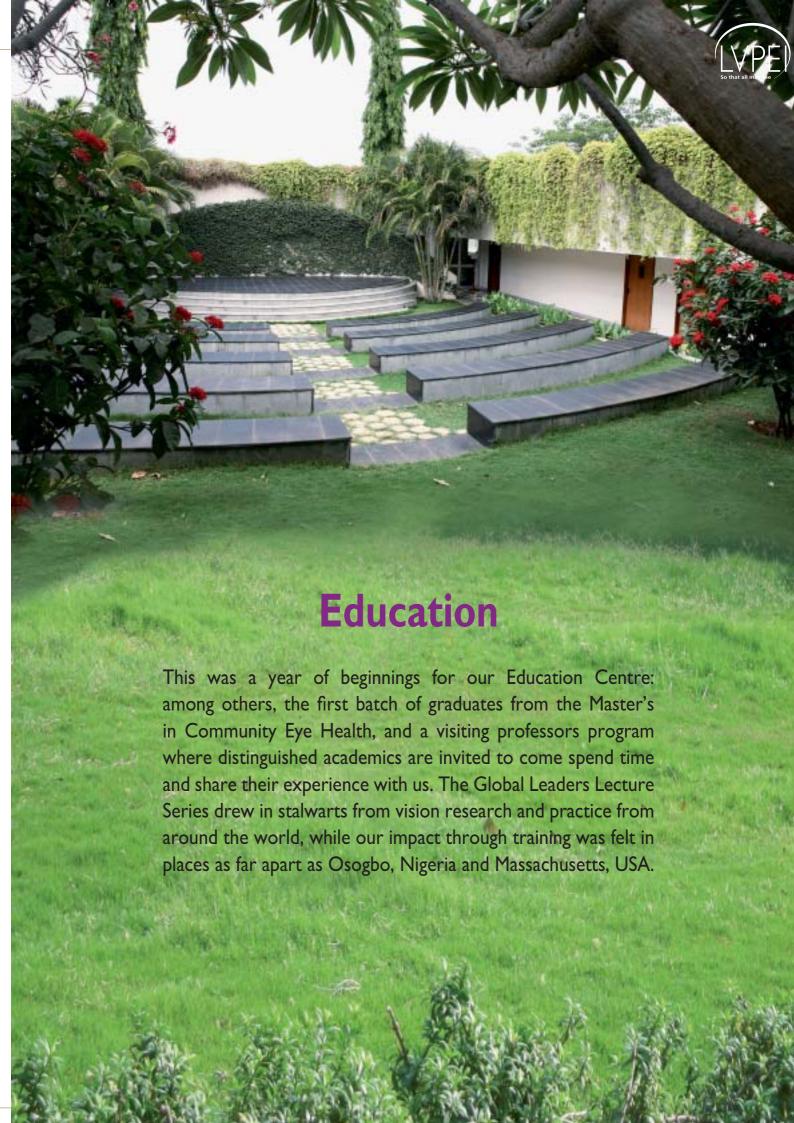
Venkataramana, the Ichoda Vision Centre technician, regularly insists on a slit lamp examination for all patients. Three years ago, his insistence proved to be a blessing for a casual visitor Shivudu, who had come to the Vision Centre merely to buy a pair of dark glasses. Venkataramana insisted then that Shivudu have an eye examination first. Fortunately for Shivudu, an alert Venkataramana detected high eye pressure during the eye examination — he appeared to have glaucoma in both his eyes, an irreversible eye disease.

Venkataramana referred Shivudu to LVPEI's secondary care Bhosle Gopal Rao Patel Service Centre in Adilabad, where Shivudu was advised to immediately undergo laser treatment. Shivudu underwent YAG laser at LVPEI's Seshanna Chennawar Eye Care Centre in Mudhol. Since then, a grateful Shivudu has been a responsible patient, following up on repeat consultations for controlling his glaucoma.

Today, Shivudu continues to sell confectionery to kirana shops in Ichoda for a living. However, now he does so with a mission. He talks to his clientele, who are in the age group of 25 to 45, about the benefits of undergoing a complete eye examination. Thus many many families are being touched by the word-of-mouth publicity for eye care!

For Shivudu it was serendipitous that Venkataramana insisted on a slit lamp examination. The dedication and commitment of vision technicians like Venkataramana enable the Institute to realize its vision to provide eye care to those living in remote areas of Andhra Pradesh.

Venkataramana has since been promoted as a Vision Centre coordinator.





The outgoing Bachelor of Science in Optometry students with faculty and guests

## A new cadre of community eye health leaders

The Graduation Day of the first batch of **Master of Community Eye Health** (MCEH) and sixth batch of Bachelor of Science in Optometry was held on February 10, 2010. Eleven candidates completed the MCEH – a one-year postgraduate coursework program in Community Eye Health offered by LVPEI, in collaboration with the University of New South Wales (UNSW), Sydney, Australia. Dr Srinivas Reddy from the Andhra Pradesh Right to Sight Society (APRTSS) topped the class.

The graduates, mostly from the government health sector, included ophthalmic assistants, program managers, and ophthalmologists, who will apply their learning to help the communities they work with, thus taking forward the global prevention of blindness program. The second batch of MCEH started on February 19, 2010. Seven students have enrolled, including a candidate from Nepal.

The same day, 17 students of the 4-year **Bachelor of Science (BS) in Optometry** program were awarded the degree certificates. This is an off-campus program of the Birla Institute of Technology & Science (BITS), Pilani, conducted by the Bausch and Lomb School of Optometry. This was the sixth batch of students – 2 were placed in distinction, 12 in the first division and 3 in the second division. Ms Khuseeya Sharif was selected the Best Student.

The guest speakers on the occasion included Prof Fiona Stapleton, Head of School of Optometry and Vision Sciences, UNSW, Australia; Prof Mala Rao, Director, Indian Institute of Public Health, Hyderabad; and Dr P V Ramesh of APRTSS. Four students, 2 each from the MCEH and BS Optometry programs also shared their experiences.



Prof Fiona Stapleton presents the degree to Dr Srinivasa Reddy



Ms Khuseeya Sharif receives her degree from Prof Mala Rao



The Masters of Community Eye Health graduates



#### Diploma in Eye Health Management

The convocation for the first Diploma in Eye Health Management (DEHM) program (2008 batch) was held on July 18, 2009. Nine students, hailing from all parts of the state, received their certificates. This marked the completion of the first year of the revamped program, which underwent substantial changes following review and feedback from both participants and the service departments of LVPEI. The DEHM program aims to inculcate administrative and managerial skills specific to LVPEI while also contributing to the overall human resources need in eye care.

At the convocation the course conveners, faculty and students shared their experiences and their expectations of the years ahead in a challenging work environment. The students will be posted at LVPEI secondary centres in various administrative positions. The 2<sup>nd</sup> batch of 8 DEHM students started training from August 3, 2009.

Outgoing Diploma in Eye Health Management students with the ICARE-LVPEI faculty and senior management



## **Diploma in Community Eye Health**



The ninth Diploma in Community Eye Health (DCEH) program concluded on June 24, 2009. Eight students were declared successful, including one from Nepal. The 10<sup>th</sup> batch of the program started from November 30, 2009. Of the 12 students enrolled 2 are from Nepal.

# **Program Management and Evaluation Certificate Course**

The first Certificate Course in Program Management and Evaluation was conducted from December 7-19, 2009, at ICARE, Kismatpur campus. This was the first time that a shorter version of the 6-week course was conducted. Of the six candidates, three were sponsored by Operation Eyesight Universal, and one each by Venu Eye Institute (New Delhi), Emmanuel Hospitals Association (New Delhi) and Bawri Nethralaya (Shillong).





Lauren and Sophia at LVPEI

# MIT - India Program

The MIT (Massachusetts Institute of Technology, Cambridge, MA, USA) International Science and Technology Initiatives, known as MISTI, connects MIT students and faculty with research and innovation around the world. This international program is a pioneer in applied international studies. Working closely with a network of premier corporations, universities and research institutes, MISTI matches over 400 MIT students with internships and research abroad each year.

The MIT-India Program facilitates dynamic connections between the thinkers and idea-makers of the MIT community and their counterparts

in India. Drawing from an extraordinary network of renowned research institutes, universities, and corporations, the program aims to be as vital and multifaceted as the country it represents. Every year top MIT undergraduates and graduates come for a summer internship at outstanding Indian firms/academic institutions. The students work on a specific project of choice; the host institution also allots them a preceptor/mentor based on their project area.

Beginning 2009, L V Prasad Eye Institute is one of the hosts for the MIT-India Program. The first two students came for an internship from June 8 – August 14, 2009. Lauren Shields and Sophia Mian worked on their summer project "Transportation of Limbal Stem Cells Cultivated on Amniotic Membrane"; Dr V S Sangwan was the technical in-charge of the program.

Lauren and Sophia spent time in clinics with various consultants and visited a secondary eye care center. They also did a small project to understand the distances from which non-paying patients come to seek eye care. Taking in a slice of Indian culture, they learnt Bharatnatyam from Dr Geeta Vemuganti's daughter Ashrita.

#### **New batch of residents**

The second batch of residents for the 3-year (MBBS qualified) and 2-year (DO qualified) postgraduation in ophthalmology program began their training in February 2010. The initiative allows the Institute to participate in the training of high quality ophthalmic residents. The students will receive their degree from the Diplomate of the National Board.



Prof B R Murthy, BITS Coordinator

## **Optometry Public Forum**

A Public Forum on Optometry was organised on February 13, 2010 to create awareness about optometry as a career for young boys and girls. The forum focused on the urgent need for qualified optometrists in India – there are only 20,000 against the need for 100,000 for the over 1 billion population. Presentations by vision scientists, industry professionals and academic optometrists showcased optometry as a rewarding option for individuals with interests in patient care, clinical and basic-science research, education and administration. All the speakers were optometrists by training. Prof B R Murthy, BITS coordinator, spoke of BITS' role in the course. Many parents and high school students attended the program to learn about this promising career path.



Dr Gullapalli N Rao Chair, LVPEI Network



Dr Prashant Garg Director, Education Centre



Ms Nisha Singh BLSO alumnus



## A New Program: Ophthalmic Pathology Fellowship

A 6-month "Ophthalmic Pathology Fellowship Program" has been launched at the Institute (Preceptor: Dr Geeta K Vemuganti) under the aegis of the Indian College of Pathologists. Training will encompass all aspects of diagnostic work with ample scope for research and teaching. Fellows will be encouraged to develop their own research interests, thus preparing for a career in academic ophthalmic pathology.

#### **Bachelor in Optometry Program**

Ten candidates were selected for the 2009 Bachelor of Science in Optometry program. Six students are from Andhra Pradesh, one from Kerala, one from Cameroon and two from Vietnam.

#### Scholarships 2009 - 2010

**Batch 2008**: Mr D G S Kelum Tissakumara, Ms Sunaina Mary Alex, Ms Peguda Rajini, Mr Bandela Praveen Kumar and Ms M M M Samanmali Malavita

**Batch 2007**: Mr Labishetty Vivek, Ms Vaishnavi Raghuram, Mr Mohammed Shafee, Ms Baggam Vijaya Preethi and Mr Jonadula Kartik

Batch 2006: Ms Ritika Kataria, Ms V Sri Latha, Ms S Jaya Sowjanya, Ms Banu R S A and Ms Bodduluri Lakshmi

At the start of each academic year five students of each batch, who excelled the earlier year, receive a scholarship and a certificate. Prof Brien A Holden, PhD, DSc, OAM, University of New South Wales presented the scholarship cheques to the students.

#### The 'Salad Bowl' Seminar

A one-day 'Salad Bowl' seminar was organized by the Indian Academy of Sciences and Wellcome Trust-DBT Alliance Centre at LVPEI, Hyderabad on July 15, 2009. Prof D Balasubramanian, President of the Indian Academy of Sciences, and Dr Anuradha Lohia, CEO of Wellcome Trust-DBT Alliance Centre, co-hosted the meeting. The Alliance is a new partnership between the Department of Biotechnology (DBT), Government of India, and the Wellcome Trust (UK). The seminar included five international speakers – Prof Mike Turner (University of Glasgow, Glasgow), Dr George Griffin (St George's University of London, London), Dr Noel Buckley (King' College, London), Dr Helen Skaer (Cambride University, Cambridge, UK) and Dr Mriganka Sur (MIT, Cambridge, USA). The speakers from India were Prof D Chatterji of IISc, Bangalore; Dr J Gowrishankar of CDFD, Hyderabad; Dr Manas Panigrahi of the Nizam's Institute of Medical Sciences, Hyderabad; Dr Geeta K Vemuganti from LVPEI and Dr Lohia. The seminar was attended by 70 participants including clinicians, researchers, clinical and research fellows from various clinical and basic research centres of the city and state.

#### Other events

- ♦ Dr Francis Char DeCroos, the **first resident from Duke Eye Center**, Duke University Medical Center, North Carolina, USA, started a 6-week rotation in clinical and research in December 2009.
- Ms Gauri Kunjeer, Consultant/Educator, International Centre for Eyecare Education (ICEE), Sydney, Australia and BLSO faculty member Mr Shyam Sunder conducted the ICEE Progressive Lens Workshop for second year students on May 4 and 5, 2009.
- On November 14, 2009 the Thakur Hari Prasad Institute of Research and Rehabilitation for the Mentally Handicapped organised a **Health Camp**, where BLSO students conducted eye screening.

Several of LVPEI's senior faculty have been appointed Visiting Adjunct Professors, Clinical Assistant Professors and Clinical Instructors to the Case Western Reserve University (CWRU), Cleveland, Ohio, USA

#### **Adjunct Professors**

Virender S Sangwan G Chandra Sekhar Prashant Garg Anil K Mandal Santosh G Honavar Ajit B Majji Subhadra Jalali

#### **Clinical Assistant Professors**

Rajeev Kumar Reddy Ramesh Kekunnaya Raja Narayanan Varsha Rathi

#### **Clinical Instructors**

Sirisha Senthil B L Harsha Rao R Muralidhar Pravin V Krishna Mukesh Taneja







Rajyalakshmi and Ujwala Baheti

Ratnesh Sharma

Neha Bharti

# A learning environment with lessons for life

Opening our doors to young medical students just embarking on specialty training has offered a challenge and a huge opportunity to spread our way of "doing things" to a new generation of medicos. The first batch of residents preparing for the Diplomate of the National Board (Ophthalmology) talk about their choice of specialty and centre.

#### Ujwala Baheti

It's a well-planned course. Although it was started just a year ago, the course is being conducted very smoothly. The surgical exposure here is really good, which does not happen is smaller institutes. The small incision surgery and phaco training is something unique. We have an independent fellow OPD and OR, where we get the opportunity to examine patients and decide the plan of management on our own. If one needs an expert opinion, one can approach the consultant/faculty. This makes you feel confident about taking decisions on your own. You start thinking of the different possible situations you have to deal with. It encourages you to think... you don't really think when the consultant does the diagnosis. The secondary DNB students are given an independent OPD/ OR one year after joining, whereas the primary DNB students get it after two years.

Initially, the going was tough. It must be difficult for the consultants to come down to the basic level to teach us, especially for primary DNB students, because they are used to training experienced fellows.

The bonding between the batchmates is good. For one year, it was just the four of us. The other fellows treated us like kids because we were new to the concepts. Sometimes we would hesitate to ask questions to the consultants/faculty but we could approach the fellows easily.

#### R Rajyalakshmi

I came to know of the program through the Eye-PEP program held by the Institute. The course is a good experience, although I had no idea that the schedule would be so hectic. The theory classes in the morning are very useful. The consultants go out of their way to teach us. We have to submit our thesis six months before the completion of the course, which is reviewed by external evaluators. We have to write it on our own unlike many of my friends elsewhere who just fake something to make a thesis. The monthly meetings with the Program Incharge Dr Honavar are very useful and provide us an opportunity to discuss our problems. This is also something that may not be happening at other places.

The only thing I am concerned about is the six-month posting to a peripheral center, which I feel is too early for a trainee.

#### Neha Bharti

When we come we have to be prepared to do some real hard work. The working hours are quite rigorous. But one has to make sacrifices to gain something. The consultants are very encouraging and patient with us although we do not have the basic knowledge of ophthalmology. The examination techniques, instruments, slit lamps, lenses and equipment used in the operation theatre are of the best quality. This program is like a walking atlas.

I don't think future batches will get the kind of attention we received as we were the first batch. But this also meant that we had no seniors to fall back upon!

#### Ratnesh Sharma

I never thought that ophthalmology would be such a tough and elaborate course. Now I feel three years is too short a time to understand the subject well. The surgical skills and training that one gets exposed to here is just incomparable with any other experience. The most important thing is that one learns the right attitude towards patients. We learn to take care of the patients and to respect them. The effort that we make is well worth it. We have an independent fellow OPD and OR, which helps us get hands-on experience.



#### **FRCS** examinations

The FRCS examinations were successfully conducted from February 8-11 at the Institute. The visiting team of 10 examiners from the Royal College of Physicians and Surgeons, Glasgow, UK, were fulsome in their praise for the overall arrangements.



# **Continuing Education Programs**

#### LVPEI, Bhubaneswar

The dry lab on **Epidemiological survey of prevalence of glaucoma in Indian community**, organized by the Indian Association of Community Ophthalmology (INACO) on May 1, 2009 was attended by 46 delegates. The objective was to prepare a protocol for conducting a survey with limited devices on the prevalence of glaucoma among the rural population.

A workshop on **Effectiveness of low vision interventions for schoolchildren** was conducted on May 21, 2009. It was attended by 13 students and 17 parents and helped children and parents learn about low vision devices and environmental modifications.



Ms Reema Helan, low vision consultant, with the students



Dr E Ravindra Mohan

Fifteen visually challenged students and an instructor were trained in the assistive screen reading software (JAWS) on August 13, 2009.

**Cutting Edge '09** – the annual oculoplasty, orbit and oncology update was held on August 15, 2009. The structure and content of the scientific meeting was tailored for the general ophthalmologist. Dr E Ravindra Mohan, Global Hospital, Chennai was an invited faculty. The 73 delegates included 24 postgraduates from medical colleges in Orissa. The meeting was telecast live to the Hyderabad and Visakhapatnam campuses and sparked off a lively interaction. Dr Suryasnata Rath was the Organizing Secretary.

The **Uveitis & Ocular Inflammation Update** on July 4, 2009 was attended by 61 delegates, of which 37 were practicing ophthalmologists and 24 postgraduate students. The meeting aimed to answer questions related to the diagnosis and management of uveitis seen in everyday practice. The panel was headed by Prof Amod Gupta, Head, Department of Ophthalmology, Postgraduate Institute of Medical Education and Research, Chandigarh. The meeting was telecast to all three LVPEI campuses and attracted lively interaction.



Prof Amod Gupta (right) with Dr Taraprasad Das, Director, LVPEI, Bhubaneswar

A **Short Course in Ophthalmic Skill Enhancement** (SCOPE) was conducted on November 13, 2009 for 32 postgraduate students from three medical colleges of Orissa. The program was an exciting combination of lectures, skill transfer and hands-on training by masters.

Dr Tapas Ranjan Padhi imparts hands-on training to the students



#### LVPEI, Visakhapatnam

Eye on the Future – Pediatric Ophthalmology and Strabismus Update, conducted February 20-21, 2010 covered major disorders of the cornea and anterior segment in children, childhood glaucomas, pediatric cataracts and retinal diseases, strabismus and ocular motility. The participants enjoyed a lively interactive session with Prof Joseph L Demer of the Jules Stein Eye Institute, UCLA, USA on 'Diagnostic and surgical approach to strabismus associated with orbital connective tissue disorders' via videoconferencing. The CME was attended by 151 delegates across the 3 LVPEI campuses and included 3 delegates from Indonesia and 1 from Nepal. Dr Virender Sachdeva was the Organizing Secretary.



Guest faculty Dr B Venkateswara Rao







Dr Pradeep Sharma, Head, Department of Strabismus, Rajendra Prasad Centre for Ophthalmic Sciences, AIIMS, New Delhi

The **Cataract & Refractive Surgery** meeting was held from March 20-21, 2010. Dr AK Bansal and Dr Srinivas K Rao were the guest faculty; 80 delegates attended the meeting.

# LVPEI, Hyderabad



Learning kitchen management skills



Delegates familiarize themselves with the assistive devices

The 21st Low vision Awareness Program (LAP) was attended by 40 delegates from various parts of the country. April 24-26, 2009





Sixty-six delegates attended the 42<sup>nd</sup> **Indian Contact Lens Education Programme** (ICLEP) Basic Course. ICLEP continues to be one of LVPEI's most popular CMEs. July 3-6, 2009

The **Postgraduate Education Program in Ophthalmology** (Eye-PEP 2009), which aims to expose fresh medical graduates to the specialty, was attended by 235 residents across all the three LVPEI campuses – Hyderabad, Bhubaneswar and Visakhapatnam. September 23-27, 2009



A total of 40 delegates, including practicing ophthalmologists, optometrists, and a social worker attended the 22<sup>nd</sup> **Low vision Awareness Program** (LAP). Several of them plan to launch primary low vision rehabilitation services in their organization. The Rehabilitation Centres team demonstrated new high-tech assistive devices and the participants were excited to see the developments in the field of low vision rehabilitation. November 20-22, 2009

Mr Deepak Bagga demonstrates an electronic low vision device (close circuit television) for reading and writing

A half-day symposium on **The role of mentoring in developing next generation of ophthalmologists in India** was conducted by Dr Larry Hulbert, an independent higher education professional from Sydney, Australia. December 6, 2009

The **Twin Cities Pathologists Meeting** was hosted by LVPEI and was attended by I25 pathologists. The meeting included an Ophthalmic Pathology quiz conducted by Dr Geeta K Vemuganti (right). LVPEI's high quality sections and slides were well appreciated. December 9, 2009

Dr Geeta K Vemuganti addresses the audience

The 43<sup>rd</sup> **Indian Contact Lens Education Programme** (ICLEP) Basic and Advanced Course was attended by 98 delegates (Basic Course) and 77 delegates (Advanced Course). December 10-14, 2009



Mr K Parthasarthi, optometrist, takes a hands-on session for the delegates



Cornea Challenges - Old and New, a one-day seminar, was attended by 170 participants. Dr M Srinivasan, Director, Aravind Eye Hospital, Madurai, delivered a guest lecture on 'Corticosteroid use in bacterial keratitis'. December 19-20, 2009

Guest faculty Dr A K Bansal, Eyemax Eye Foundation at the Cornea meeting

World Glaucoma Week was commemorated with a **Glaucoma Update** on March 7, 2010 across the three campuses, with 85 delegates attending at Hyderabad and 27 at Visakhapatnam.



Dr G Chandra Sekhar greets a participant of the Glaucoma support meeting



Training during the Glaucoma Update

The three campuses organised **glaucoma support group meetings** on March 8, 2010 for patients and their families to help them understand the disease and share strategies to manage it – medically, emotionally and psychologically. World Glaucoma Week, observed in partnership with World Glaucoma Association, is an occasion to raise awareness about glaucoma and its management.

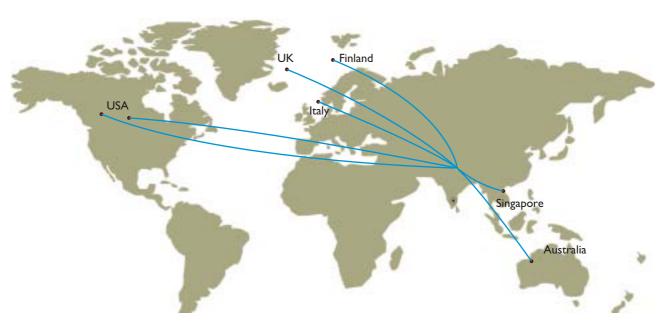


Dr Anil K Mandal talks to his patients and their parents

The 15th annual meeting of the Association of Parents of Childhood Glaucoma (APCG), held on November 16, 2009 was attended by 70 children along with their parents and relatives. Several faculty members and volunteers made presentations in English, Hindi and Telugu on the clinical manifestation of childhood glaucoma and its management. Parents spoke of their experiences in living with the disease, while the children participated with songs and recitals. Most of the children are doing well academically, as a result of the Institute's efforts in integrating medical, surgical and rehabilitative approaches to the disease.



#### **Guest Lectures**



The wide network LVPEI has established with institutions and organisations worldwide enables it 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:

#### **Global Leaders Lecture Series**

In keeping with our effort to engage with learning and knowledge sharing on a global platform, and make opportunities for such engagements available to all those who are part of LVPEI, the Education Centre initiated the Global Leaders Lecture Series last year. The series brings the best minds in ophthalmology and vision sciences in interaction with the faculty, fellows and trainees at LVPEI's three campuses (Hyderabad, Bhubaneswar and Visakhapatnam) through real-time videoconferencing. During the past year, we have been privileged to listen to lectures from, and hold discussions with 9 eminent researchers and practitioners from across three continents.

**Dr Robert Goldberg**, Professor of Ophthalmology and Chief of Orbital and Ophthalmic Plastic Surgery and Co-director, Aesthetic Reconstructive Surgery Service, Jules Stein Eye Institute, UCLA, USA spoke on 'Surgical management of thyroid eye disease: state of the art'. July 21, 2009

**Professor Tien Wong**, Director, Singapore Eye Research Institute, Singapore, delivered a lecture on 'Hypertension and the eye'. July 31, 2009

**Prof Douglas R Anderson**, Professor, Douglas R Anderson Chair in Ophthalmology, Bascom Palmer Eye Institute, University of Miami School of Medicine, Miami, Florida, USA delivered a lecture on 'Obligation of a physician'. August 24, 2009

**Prof Mark Mannis**, Professor and Chair, Department of Ophthalmology, UC Davis Medical Center, Sacramento, California, USA, delivered a lecture on 'Evolutions in the management of keratoconus'. October 5, 2009

**Dr Perry Rosenthal**, Clinical Professor of Ophthalmology, Harvard Medical School, Boston, USA delivered a lecture on 'Dry eye pain, the great pretender'. November 30, 2009

**Dr H Dwight Cavanagh**, Vice-Chairman, Department of Ophthalmology and Dr W Maxwell Thomas Chair in Ophthalmology, South Western Medical Centre, The University of Texas System, Texas, USA delivered a talk on 'Causes and prevention of contact lens related microbial infection'. January 30, 2010

**Prof Joseph L Demer**, Leonard Apt Professor of Pediatric Ophthalmology and Chief, Comprehensive Ophthalmology Division, Jules Stein Eye Institute, UCLA, USA delivered a lecture on 'Diagnosis and management of strabismus'. February 21, 2010

**Prof Peter G Watson**, Professor Emeritus, University of Cambridge, UK delivered a lecture on 'Sclera and systemic disease'. February 26, 2010

**Dr David R Williams**, William G Allyn Professor of Medical Optics and Director, Center for Visual Science, University of Rochester, New York, USA delivered a lecture on 'Imaging retinal mosaics in the living eye'. March 10, 2010



#### International guest lectures at CMEs

Several global guest lectures were delivered as part of our Continuing Medical Education (CME) programs through videoconference.

**Dr James Chodosh**, Professor of Ophthalmology, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, USA, delivered a series of talks on 'Boston Keratoprosthesis' and 'Genomic adenoviral keratitis'. July 27-29, 2009

**Prof Robert C Kersten**, Professor of Ophthalmology, University of Cincinnati Medical School, USA, delivered a talk on 'Lymph proliferative disorders of the orbit and adnexa' through videoconference from LVPEI, Bhubaneswar. October 6, 2009 (*Picture alongside*)



**Prof Donald Tan**, Medical Director, Singapore National Eye Center, Singapore delivered a lecture on 'Evolution of lamellar keratoplasty' at the 'Cornea Challenges – Old and New' meeting. December 19, 2009

**Dr James Aquavella**, Professor, Department of Ophthalmology, University of Rochester, Rochester, USA, delivered a talk on 'Evolution of keratoprosthesis surgery'. January 19, 2010

**Dr Surendra Basti**, Associate Professor of Ophthalmology, Northwestern University Feinberg School of Medicine, Chicago, II, USA delivered a lecture on 'Management of challenging IOL situations' as part of the Cataract and Refractive Surgery seminar 'Target 20/20: Quest for supernormal vision'. March 20-21, 2010

#### **Visiting Professorships**

#### **Hyderabad**

**Larry Hulbert**, independent higher education professional, Sydney, Australia is conducting a comprehensive educational audit of LVPEI's current training programs as part of quality improvment/assurance effort. He visited LVPEI in December for 4 weeks. The other aspects of education he will be looking at include infrastructure development, training of trainers, how to ensure better mentoring, clinical performance evaluation for post-doctoral fellows and/or other clinical programs. Dr Hulbert is donating his services to the Institute.

**Prof T Rowan Candy**, Associate Professor, Indiana University School of Optometry, Indiana, USA visited LVPEI in February and March 2010 to collaborate on a research project with Dr Shrikant Bharadwaj. The project focuses on understanding the visual experience of infants and children with different spectacle prescriptions in the two eyes (anisometropia).

#### **B**hubaneswar

**Prof Robert C Kersten**, Professor of Ophthalmology, University of Cincinnati Medical School, USA visited LVPEI Bhubaneswar as ORBIS visiting faculty (October 5-8, 2009). He lectured on a range of topics in ophthalmic plastics and orbital diseases, including lymphoproliferative disorder and soft tissue injuries to the orbit and adnexa, and also actively interacted with the faculty on several challenging cases.

**Prof Amod Gupta**, Head, Ophthalmology, Postgraduate Institute of Medical Education & Research (PGIMER), Chandigarh visited Bhubaneswar campus from June 29 to July 5, 2009 and worked closely with the Retina Services. His lecture on 'Significance of clinical signs and symptoms in uveitis' was telecast to all the campuses and attracted a lively interaction. On July 1, 2009



#### **Guest Lectures - Ophthalmology**

**Prof Anja Tuulonen**, Department of Ophthalmology, University of Oulu, Finland, delivered a talk on 'EBM in glaucoma care'. April 17, 2009

**Dr Avinash Mahindrakar**, Ophthalmologist, Seven Hills Hospital, Visakhapatnam, delivered a lecture on '*Medial rectus pulley sutures*'. April 28, 2009

**Dr Mandeep Sagoo**, Senior Consultant in Ophthalmology, Moorfield's Eye Hospital, London, UK, delivered a lecture on 'Interpretation of fluorescein angiography and interesting cases'. September 29, 2009

**Dr Anthony Aldave**, Professor of Ophthalmology and Director, Cornea Service and Director, Cornea & Refractive Surgery Fellowships, Jules Stein Eye Institute, Los Angeles, USA, delivered a talk on 'Femtosecond laser assisted keratoplasty: fad or future'. January 18, 2010

**Dr Giancarlo Falcinelli**, Professor of Ophthalmology, Rome University, and Scientific Diector, Osteo-odonto Keratoprosthesis Foundation, Italy, delivered a talk on 'MOOKP' (modified osteo-odonto keratoprosthesis). January 20, 2010

**Professor Gordon Dutton**, Consultant Ophthalmologist, Royal Hospital for Sick Children, Glasgow, UK, delivered a lecture on 'Cerebral vision impairment in children: are we missing the diagnosis?' February 9, 2010

**Dr Rowan Candy**, Associate Professor, Indiana University School of Optometry, Indiana, USA, delivered a lecture on 'The visual experience of the human infant'. February 10, 2010

#### **Guest Lectures - General**

**Mr Rajnesh Domlapalli**, award-winning film director, spoke on 'Making of a film and the rationale behind various choices'. April 8, 2009

**Prof S Upendran**, Professor, English and Foreign Languages University, delivered a talk on 'Words and their stories – everyday idioms and where they come from'. May 13, 2009

**Dr Hari Garudadri**, Senior Staff Engineer, Qualcomm Research Center, San Diego, CA, USA, delivered a talk on 'Clinically reliable sensing and telemetry of vital signs for healthcare and prevention: opportunities and challenges'. August 12, 2009

**Dr Fiona MacLaughlin**, Senior Business Analyst, Wellcome Trust, London, UK spoke on 'New initiatives in R&D for affordable healthcare in India'. August 22, 2009

**Dr K Gayathri**, Consultant Hematopathologist, Lifeline Tapadia Diagnostic Services and Founder-Secretary, The Hematology Foundation of Hyderabad delivered a talk on 'Shifting focus from laboratory to the community'. September 9, 2009

Ms Rohini Mukherjee, General Manager, Global Partnerships, Naandi Foundation, spoke on Naandi Foundation's community development initiatives, focusing on their work in education and primary health. November 11, 2009

Mr Ajay Gandhi, Convenor, Manthan (an intellectual forum that debates issues of concern and current interest affecting us as citizens and participants in the civic life of a democracy) delivered a talk on 'How, as thinking individuals, we can engage with issues of public interest'. December 9, 2009

**Dr Larry Hulbert**, independent higher education professional, Sydney, Australia delivered a talk on 'Learning that lasts: the challenges for all educators'. December 11, 2009

**Dr Prasad Gangadhar Killaru**, Plastic Surgeon from California, USA delivered a talk on 'Quality assurance in surgical care'. January 6, 2010

**Ms Michelle Chamberlain**, Leadership Development Manager, SightLife, Seattle, USA, delivered a lecture on 'Adult education'. February 1, 2010

**Dr Naomi Brecker**, Occupational Physician at the Royal Free Hospital, London gave a talk on '*Occupational health*'. February 12, 2010

Mr Pankaj Sekhsaria from the environmental NGO Kalpavriksh, and freelance writer/photographer delivered a lecture on 'The environmental movement and what it means for the average citizen'. March 10, 2010

# **Ophthalmology Education Programs**

Training programs are conducted at all 3 campuses - Hyderabad, Bhubaneswar and Visakhapatnam.

#### **Cornea & Anterior Segment**

Dr Jatin Naresh Ashar New Delhi Dr Mohammed El - Hanan Egypt

Dr Monammed El - Hanan
Dr Ajay Ramesh Kaushik
Dr C Jagadish Reddy
Dr I S Murthy
Dr Shivani Pahuja
Egypt
Bengaluru, Karnataka
Suryapet, Andhra Pradesh
Gurgaon, Haryana

3 months
Dr Kapil Arneja
Dr Poonam Lavaju
Dr Paul Eric Paria
Dr New Delhi
Dharan, Nepal
Shillong, Meghalaya

Dr Deepthi R Meda Bengaluru, Karnataka
Dr Subhra Sil Hyderabad, Andhra Pradesh
Dr Sonia Kothari Mumbai, Maharashtra

Dr Suhas Ganpatrao Aurangabad, Maharashtra (Visakhapatnam)

#### Glaucoma

24 months

24 months

Dr Arpita Basia Gwalior, Madhya Pradesh

Dr Aparna Rao New Delhi

Dr B Pradeep K Reddy Nandyal, Andhra Pradesh

3 months

Dr Baswati Prasanth New Delhi

Dr Shams Md Noman
Dr Surabhi Mehra
Chittagong, Bangladesh
Chandrapur, Maharashtra

#### **Retina Vitreous**

24 months

Dr Vivek Pravin Dave Mumbai, Maharashtra
Dr Jyotsna Myneni Hyderabad, Andhra Pradesh

Dr Nidhi Relhan Mohali, Punjab

Dr Saley Thearith Phnom Penh, Cambodia

3 months

Dr Nguyen Tuan Thanh Hao Danang, Vietnam Dr Mohammad Ismail Hossain Dhaka, Bangladesh

Dr M Madhavi Vijayawada, Andhra Pradesh

Dr Saumya Sanyal Darjeeling, West Bengal (Bhubaneswar)

Dr Jeannine Srourian Aleppo, Syria Dr Ravinder Malik Chandigarh

Dr Karma Looday Bhutia Sikkim, Gangtok (2 months)
Dr Sumita Karandikar Mumbai, Maharashtra (1 month)

#### **Comprehensive Ophthalmology**

#### 36 months

**Hyderabad** 

Dr Shiraz Ali

Dr Anthony Vipin Das

Dr Trupti Kadam

Ranchi, Jharkhand

Hyderabad, Andhra Pradesh

Hyderabad, Andhra Pradesh

Dr K Madhavi Latha Hyderabad, Andhra Pradesh Dr Smruti Rekha Priyadarshini Bhubaneswar, Orissa **Bhubaneswar** 

Dr Sushant Chatterjee Kolkata, West Bengal
Dr Vivek Warkad Buldhana, Maharashtra
Dr Samir Mahapatra Bhubaneswar, Orissa
Dr Sameera Nayak Bhubaneswar, Orissa

Visakhapatnam

Dr Phaneender Reddy
Dr Jay Goyal
Hyderabad, Andhra Pradesh
Mumbai, Maharashtra

#### 3 months

**Hyderabad** 

Dr M B DeshkarNagpur, MaharashtraDr Sandeep PatilBelgaum, KarnatakaDr Ravi TejaChittoor, Andhra Pradesh

#### Pediatric Ophthalmology (3 months)

Dr Michaeline A Isawumi Osogbo, Nigeria

#### **Ophthalmic Plastic Surgery, Orbit & Ocular Oncology**

24 months

Dr Tajani Vivek Dave Mumbai, Maharashtra Dr Surbhi Joshi Baroda, Gujarat Dr Kaliki Swathi Bengaluru, Karnataka 3 months

Dr Alice Goh Siew Ching Selang, Malaysia Dr Pallavi Dhawan Meerut, Uttar Pradesh

Dr Balogun Bolanle Grace Lagos, Nigeria

Dr Reena Abdul Rasheed Thiruvananthapuram, Kerala Dr Swati Tamaskar Bhopal, Madhya Pradesh

#### Postgraduate residency (DNB)

**Primary** 

Dr Priyanka V Gogte Hyderabad, Andhra Pradesh
Dr Maneck D Nicholson Mumbai, Maharashtra

**Secondary** 

Dr Siddharth Dikshit Bokaro Steel City, Jharkhand Dr G Deva Prasad Bengaluru, Karnataka



#### Manual Small Incision Cataract Surgery (I month)

**Hyderabad** 

Dr Tushara Aluri Hyderabad, Andhra Pradesh
Dr Pramod Gavai Nagpur, Maharashtra
Dr Pramod Motiram Gawai Nagpur, Maharashtra
Dr Praveen Pare Puttur, Karnataka
Dr Sandeep Sabharwal New Delhi

Visakhapatnam

Dr Saudip Sen Kolkata, West Bengal
Dr M Sumathi Nandyal, Andhra Pradesh
Dr Sita Tatapudi Visakhapatnam, Andhra Pradesh
Dr Rita Agarwal New Delhi

#### Phacoemulsification (I month)

**Hyderabad** 

Dr Rita Agarwal New Delhi Dr Bindu Goel Guwahati, Assam Dr M Deshkar Nagpur, Maharashtra Dr Rajesh Goyal Mumbai, Maharashtra Chandrapur, Maharashtra Dr Surabhi Mehra Dr S S Quadri Parbani, Maharashtra Dr Mamta Narain Hyderabad, Andhra Pradesh Dr Debrandra Kumar Sahu Berhampur, Orissa Dr Asha Sharma Chandigarh

Visakhapatnam

Dr Thu Pham USA
Dr K N Sree Kavitha Hyderabad, Andhra Pradesh
Dr S Vasantha Nellore, Andhra Pradesh

**B**hubaneswar

Dr Vinay Bohra Jaipur, Rajasthan
Dr Kiran Sharma Bengaluru, Karnataka

#### Retina Laser (I month)

New Delhi Dr Manish Kumar Agarwal Dr Abdul Hannan Miah Dhaka, Bangladesh Dr A Balasubrahmanyam Dr Anil D Mehta New Delhi Hyderabad, Andhra Pradesh Dr Santosh K Bulchandani Mumbai, Maharashtra Dr V P Poonkodi Hyderabad, Andhra Pradesh Dr Sachin Dharwadkar Mumbai, Maharashtra Dr A Bhaskara Rao Prakasam, Andhra Pradesh Dr Sumita Karandikar Mumbai, Maharashtra Dr Rohini Reddy Hyderabad, Andhra Pradesh Dr Vrinda Raikar Mumbai, Maharashtra Dr Vinitha Reddy Hyderabad, Andhra Pradesh Dr Suparna Ghosh Kolkata, West Bengal Dr A Sathish Prakasam, Andhra Pradesh

#### Retinopathy of Prematurity (I month)

Dr Syed Basheer Ahmed Malappuram, Kerala Dr Bharati Deuri Guwahati, Assam
Dr Nitin R K Jain Surat, Gujarat Dr Sucheta Kulkarni Pune, Maharashtra
Dr Kalpit Shah Ahmedabad, Gujarat Dr Florence M Manurung Jakarta, Indonesia

#### Visual Electrophysiology (I month)

Ms Anupama Panda Bhubaneswar, Orissa Dr Reema Bansal Chandigarh
Ms Kalyani Sahoo Bhubaneswar, Orissa

#### LVP - ZEISS Basic Course in Ophthalmic Diagnostics (I month)

Dr Farooq Aman Bhopal, Madhya Pradesh Dr Navakanth Bandi Kakinada, Andhra Pradesh Bhopal, Madhya Pradesh Dr Animesh Sahu Dr M V Mahaian Hyderabad, Andhra Pradesh Dr Krishna N Devanagiri, Karnataka Dr Varun Malhotra Hyderabad, Andhra Pradesh Dr Adarsh S Naik Devanagiri, Karnataka Dr R Meher Tej Ravula Kakinada, Andhra Pradesh Dr Ponnappa M M Tumukur, Karnataka Dr Madhusmita Behra Berhampur, Orissa Dr Abhishek C Bawdekar Belgaon, Karnataka Dr Mahesh Berhampur, Orissa Dr Shweta B M Dr Arun K Panigrahi Bijapur, Karnataka Berhampur, Orissa Dr Shireen Rashid Bijapur, Karnataka Dr Suchismita Mishra Berhampur, Orissa Mandya, Karnataka Dr Veena U H Dr Neelima Sahu Berhampur, Orissa Dr Rohit Patil Gulbarga, Karnataka Dr Shitikantha Pradhan Burla, Orissa Dr Piyush Pael Yeotmal, Karnataka Dr Pranamitu Pujari Burla, Orissa Dr Paaraj Dave Baroda, Gujarat Dr Anjali Khadia Sambalpur, Orissa Latur, Maharashtra Dr Priyadarshini Mishra Dr Ashish Holani Sambalpur, Orissa Madurai, Tamil Nadu Dr N Satish Kumar Dr Rhibhu Soni Ludhiana, Punjab Dr Sameer S Suratwala Coimbatore, Tamil Nadu Dr Rubina Soni Ludhiana, Punjab Dr Minakshi Jain Guwahati, Assam Dr Arun Kumar Pandey Jamshedpur, Jharkhand Dr Divya Vira Guwahati, Assam

#### **Medical Elective**

Dr Candy K Chan
Dr Mitra Gonzalez
University of Rochester, Rochester, NY, USA
Dr Francis Char De Croos
Dr Alison Smith
University of Rochester, Rochester, NY, USA
University Medical Center, NC, USA
Case Western Reserve University, Australia

#### **Preceptorship**

Mr Kevin Chan	Carlton, Australia	Ms Anisha Daudia	Birmingham, UK
Ms Ann Nguyen	Carlton, Australia	Ms Heran Mistry	Birmingham, UK
Mr Siddharth Ogra	Auckland, New Zealand	Ms Rakhee Parikh	Birmingham, UK
Ms Priya Patel	London, UK	Ms Ratna Vadera	Birmingham, UK
Ms Mehreen Suleman	London, UK	Ms Kana Odera	Birmingham, UK
Ms Parminder Randhawa	London, UK	Ms Urvasee Patel	Birmingham, UK

#### **Ocularistry Fellowship** (24 months)

Ms Nusrat Changal Sopore, Jammu & Kashmir Mr Rey Kumar Bokaro, Jharkhand

#### Research Fellowship (6 months)

Dr P M Fairooz Kannur, Kerala Ophthalmic Plastics
Dr Ruchi Mittal Patia, Orissa Pathology

#### **Vitrectomy Training (I month)**

#### Visakhapatnam

Dr Patricia Schwacha Germany

#### **Observership**

#### Hyderabad

	Hyderabad	
Mr Dikshith Komirishetty	Hyderabad, Andhra Pradesh	BITS, Pilani*
Mr Tejaswi Kumar	Hyderabad, Andhra Pradesh	BITS, Pilani
Mr Sandeep M	Hyderabad, Andhra Pradesh	BITS, Pilani
Mr C Rakesh	Hyderabad, Andhra Pradesh	BITS, Pilani
Ms G Ramya Reddy	Hyderabad, Andhra Pradesh	BITS, Pilani
Mr Manashree Sanjay	Hyderabad, Andhra Pradesh	BITS, Pilani
Mr C V Santosh	Kurnool, Andhra Pradesh	BITS, Pilani
Dr Hussain Ahmed	Tanuku, Andhra Pradesh	Comprehensive Ophthalmology
Ms Ampi Bamin	Shillong, Meghalaya	Comprehensive Ophthalmology
Mr Kamal Hasan	Shillong, Meghalaya	Comprehensive Ophthalmology
Mr Biswajit Goswami	Shillong, Meghalaya	Contact Lens
Mr Firdoos Jaman	Shillong, Meghalaya	Contact Lens
Ms Dipikar N Gajjar	Ahmedabad, Gujarat	Contact Lens
Mr Kamal Kanta Jana	Purba Midnapore, West Bengal	Contact Lens
Dr M Rajeswari	Chennai, Tamil Nadu	Contact Lens
Ms Sujata Samal	Bhubaneswar, Orissa	Contact Lens
Dr Ibrahim Saoud	Sharjah, UAE	Contact Lens
Dr Hitendra Ahooja	Gurgaon, Haryana	Cornea & Anterior Segment
Dr R K Gandhi	Gwalior, Uttar Pradesh	Cornea & Anterior Segment
Dr Shariq Riaz	Lucknow, Uttar Pradesh	Cornea & Anterior Segment
Dr K Padmini	Hyderabad, Andhra Pradesh	Cornea & Anterior Segment
Dr Stelson Sia	KLA, Philippines	Cornea & Anterior Segment
Dr Kapil Arneja	New Delhi	Cornea & Anterior Segment
Dr Shafi Khan	Dhaka, Bangladesh	Cornea & Anterior Segment
Dr Rikin Shah	Oman	Cornea & Stem cells
Mr Shivcharan Mehta	Biratnagar, Nepal	Counseling
Dr Reema Bansal	Chandigarh	Electroretinogram
Ms Anupama Panda	Bhubaneswar, Orissa	Electroretinogram
Ms Kalyani Sahoo	Bhubaneswar, Orissa	Electroretinogram
Dr Smriti Jain	Dehradun, Uttarakhand	Glaucoma
Dr P Sreenivasa Rao	Hyderabad, Andhra Pradesh	Glaucoma
Dr Madhur Hans	New Delhi	Glaucoma
Dr Manali Shah	Oman	Glaucoma
Ms Sophia Mian	Cambridge, USA	MIT - India Program
Ms Lauren Shields	Cambridge, USA	MIT - India Program
Ms Amita Rani	Patia, Orissa	Nursing
Ms Babita Saini	Udaipur, Rajasthan	Nursing
Ms Kalayni Samal	Patia, Orissa	Nursing
Dr Yuvetee Marie B Santiago	Manaluyong, Philippines	Ophthalmic Plastics
Dr (Col) P S Moulick	Hyderabad, Andhra Pradesh	Ophthalmic Plastics
Dr Sreekala	Kochi, Kerala	Ophthalmic Plastics
Prof R M Sukula	Aligarh, Uttar Pradesh	Ophthalmic Plastics

<sup>\*</sup> Birla Institute of Technology & Science, Pilani



Pediatric Ophthalmology

Dr Prerna Gupta New Delhi Ophthalmic Plastics Mr Rahmat Cholas Cambridge, USA Optometry Ms Renee Smith Cambridge, USA Optometry Ms Bahunlang Dhar Shillong, Meghalaya Optometry Mr Banshanhi I Nongkhlaw Shillong, Meghalaya Optometry Ms Tifulhy Kokhlet Shillong, Meghalaya Optometry Shillong, Meghalaya Ms Graceciabell Sna Optometry Ms P L Sowjanya Krishna Hyderabad, Andhra Pradesh Optometry Mr Sachin Mishra Udaipur, Rajasthan Optometry Mr Vallam Srinivasa Rao Canberra, Australia Optometry Ms Donya Eghrari Vermont, Australia Optometry Mr Jayson Ward Highton, Australia Optometry Ms Helen Wong Vermont, Australia Optometry Ms Ayesha Yalamarthy Saginaw, USA Optometry Dr S K Mohibullah Nellore, Andhra Pradesh Phacoemulsification Guntur, Andhra Pradesh Dr Malleswari Medikonda Retina Vitreous Dr J M Lokabhi Reddy Hyderabad, Andhra Pradesh Retina Vitreous Ms Gurpreet Kaur Chandigarh Rehabilitation Dr Kavita Patil Nalgonda, Andhra Pradesh Penetrating Keratoplasty

#### **B**hubaneswar

Mr Hirak Ranjan Dash Orissa Microbiology (I month) Ms Payal Priyadarshini Kanungo Orissa Microbiology (3 months) Mr Abhijit R Makki Pondicherry Microbiology (3 weeks) Ms Swagatika Mohapatra Orissa Hospital Infection Control (2 months)

Raipur, Chhattisgarh

Ahmedabad, Gujarat

Mr Linu Pradhan Orissa Microbiology (4 months)

Dr Anupam Sahu

Dr Sajani K Shah

# **Optometry Education Programs**

Ms Sai Amrutha Valiveti

#### **Bachelor of Science in Optometry (2009 Batch)**

Mr John Michael Kottayam, Kerala
Ms Rishitha Mantena West Godavari, Andhra Pradesh
Ms Pratyusha R Hyderabad, Andhra Pradesh
Mr Gannavarapu Rajesh Hyderabad, Andhra Pradesh
Mr Suragani Raja Kadappa, Andhra Pradesh
Ms S T Sabiha Tabassum Kurnool, Andhra Pradesh

#### Fellowship in Optometry (13 months)

Nuziveedu, Andhra Pradesh

#### **Hyderabad**

Mr Danish Ahmad New Delhi Kolkata, West Bengal Mr Ashim Dey Mr Md Oliullah Abdal Kolkata, West Bengal Mr Antriksh Jain New Delhi New Delhi Mr Anirban Ghosh Kolkata, West Bengal Mr Ekansh Maggo Ms Sana Quadri New Delhi Ms Bidula Das Kolkata, West Bengal Mr Akshay Saluja New Delhi Mr Sourav Karmakar Kolkata, West Bengal Aligarh, Uttar Pradesh Ms Ghazal Amini Mr Debayan Mahesh Kolkata, West Bengal Mr Raj Kumar Singh Moradabad, Uttar Pradesh Ms Somadatta Maitha Kolkata, West Bengal Ms Shah Divya Bhailal Mumbai, Maharashtra Mr Sampad Mallick Kolkata, West Bengal Ms Snehal S Bhalerao Mumbai, Maharashtra Mr Krishnendu Mandal Kolkata, West Bengal Ms Yogita Prabhakar Kadam Mumbai, Maharashtra Mr Biman Das Kolkata, West Bengal Ms Supriya Arjun Patil Mumbai, Maharashtra Mr Soujanya Mondal Kolkata, West Bengal Ms Medha A Satam Mumbai, Maharashtra Mr Purbasa Roy Kolkata, West Bengal Ms Purvi Hitrsh Turakhia Mumbai, Maharashtra Mr Avik Sen Kolkata, West Bengal Ms Mausumi Rov Khowai, Tripura Ms Nimisha Tripathi Choudwar, Orissa Ms Kamakshi Soni Dehradun, Uttarakhand Ms Celia Vinny V Ernakulam, Kerala Mr Labishetty Vikranth Nizamabad, Andhra Pradesh

#### Visakhapatnam

Ms Arnick Mallick West Bengal

#### **External Internship at Bausch & Lomb School of Optometry**

#### 9 months

#### Padmashree Dr D Y Patil Institute of Optometry and Visual Science, Pune, Maharashtra

Mr Suman Bandha Nalgonda, Andhra Pradesh Mr Saleem Shaik East Godavari, Andhra Pradesh

#### School of Optometry, Bharatiya Vidyapeeth, Pune, Maharashtra

Dalsingsarai, Bihar

Ms Shilpa Jain Vijayawada, Andhra Pradesh
Ms Manisha Laxman Jori Mumbai, Maharashtra
Ms Ranjana Kale Bhilai, Chhattisgarh
Mr Shaheer Ahmad Qidwai Allahabad, Uttar Pradesh

#### 6 months

Mr Shubham Panikar

#### Manipal College of Allied Health Science, Karnataka

Ms Priya Kurian Kanoor, Kerala
Ms Sanila Lawrance Kochi, Kerala
Mr Sandeep Kumar Pandey Rewa, Madhya Pradesh

#### **BSc in Ophthalmic Techniques, IGNOU (2 years)**

Mr Prashant Kumar Banka, Bihar Mr Ghulam Rasool Gaya, Bihar Mr Ramesh Kumar Muzafarpur, Bihar Mr Abhishek Shandilya Patna, Bihar Mr Md. Sanaullah Muzafarpur, Bihar Mr Navjeet Vimal Jahanabad, Bihar Mr Vijay Shankar Kumar Biharsharif, Bihar Mr Sunil Kumar Deoghar, Jharkhand



#### **Optometry Internship (I year)**

#### Visakhapatnam

Ms Hampe Sadhashiv

Pune, Maharashtra

#### **Bhubaneswar**

Ms Ananya Dutta Mr Sujoy Mukherjee Mr Rudra Prasad Singha Kolkata, West Bengal Kolkata, West Bengal Baharampur, West Bengal Ms Priyanka Modi Mr Antra Shankar Ms Unnati Vaish

Ramghad, Jharkhand Goda, Bihar Sitapur, Uttar Pradesh

#### Vision Technicians (I year)

#### **Andhra Pradesh**

Adilabad

Ms T Alekhya Mr D Susheel Kumar

Mr S Vinay Kumar Mr P Mahesh

Mr S Sanjeev

Mr K Shekar

Ms K Swapna

Chittoor

Mr M Jayaseela Babu Ms K Shireen Taj

Guntur

Ms Aila Jyotsna

**Hyderabad** 

Ms M Liviza

Khammam

Mr K Chaithanya Mr Koutam Shyamraj

Ms N Divya

Ms M Shamantha

Krishna

Mr B Siva Koteswara Rao

Kurnool

Ms Thulesamma

Madanapalle

Ms Hima Bindu

**Mahaboobnagar** Mr Atheeq Ahmed Nalgonda

Mr B Saidulu

**Prakasham** 

Mr V V Cheninaiah

Mr Johnny K

Mr T Govinda Raju

Mr Shalem Raju Ms T Sukanya

Ms K Ushanjali

Mr P Nagarjuna

Mr Bysani Praveen

Mr Allam Srinivasulu

Rangareddy

Ms Harini

Srikakulam

Mr Botla Satya Kishore

Mr Muddada Appala Naidu

Mr Ch Rajesh

Mr Kolla Govinda Raju

Mr Ch Venkata Ramana

Mr K Eswara Rao

Mr Palli Haranadha Rao

Mr M Ramu

Visakhapatnam

Mr Karun Kumar

Ms R Padmaja

Mr K Appala Raju

Mr Molli Appala Raju

Mr Gollapalli Satyanaratana

Mr N Srinivas

**Assam** 

Mr Sri Dhanjit Bhattacharya

Mr Amrit Deka

Mr Sri Shyamanta Deka

Mr Kamal Hazarika

Ms Priyam Krishna Sarma

Gujarat

Ms Archana Rambhai

Moradabad, Uttar Pradesh

Ms Darshika Chavdhary

Mr R Gopal

Mr Rohit Kumar

Ms Tasleem Qamar

Mr Mohan Saini

Mr Banti Singh

Mr Rajendra Singh

Orissa

Mr Kartik Jena

Mr Panchanana Madhual

Ms Pankajini Nayak

Ms Suryasmita Nayak

Mr Prashant Kumar Panda

Ms Subhashree Patra

Mr Nihar Ranjan Sahoo

Ms Kshyanaprava Samal

Ms Rubina Swain

#### Reliance - Vision Express

#### **Hyderabad**

New Delhi Mr Ishfaz Ahmad Mr Samik Bandhu New Delhi Mr Rahul Kukreja Mr Vikram Bandhu New Delhi Mr Prasonjeet Mr Kingshuk Bhunia Ms Azra Tabassum New Delhi Mr Arijit Chatterjee Mr Ram Prakash Varma Mr Rajashri Dey New Delhi Mr Sameer Ahmed Hyderabad, Andhra Pradesh Ms Nipa Lodh Mr Chandra Sekhar Azad Hyderabad, Andhra Pradesh Ms Amrita Maity Hyderabad, Andhra Pradesh Mr Suman Majumdar Mr Avinandan Bagchi Ms Hema Latha Hyderabad, Andhra Pradesh Ms Suniti Samanta Mr Aravind Kumar M Hyderabad, Andhra Pradesh Mr Mukesh Kumar Bansal Mr B Raveendra Hyderabad, Andhra Pradesh Mr Ganesh Madhav Hyderabad, Andhra Pradesh Mr Syed Rizwan Ms Surashri Mudgalkar Mr A Phani Krishna Athreya Tenali, Andhra Pradesh Mr Nagesh Puranik Mr Jeevan Rao Adilabad, Andhra Pradesh Mr Nitin Ran Singh Mr A Sainath Adilabad, Andhra Pradesh Mr Nadeem Ansari Ms Y Reddemma Kadapa, Andhra Pradesh Mr Preksha Joshi Ms Ramadevi Vunnam Guntur, Andhra Pradesh Mr Meeta Veshmaker Ms Ujwala Waghmare Ms Macwan Angela Ahmedabad, Gujarat Ms Asfiya Sayed Ahmedabad, Gujarat Mr Ram Suresh Yadav Mr Devendra K Patel Ahmedabad, Gujarat Ms Ispita Banerjee Ms Ruchi D Halhari Mr Rama Krishna Gandhinagar, Gujarat Mr A Hemanth Kumar Ms Sweta Chetranshi Kanpur, Uttar Pradesh Mr Manjit Kumar Uttar Pradesh Mr Naveen Kumar Mr Pankaj Kumar Lucknow, Uttar Pradesh Mr Suman Monolanobish Ms Priyanka Kalaskar Jhansi, Uttar Pradesh Mr Dilip A S Nagarath Mr Naser Ahmed Shaik Murshidabad, Uttar Pradesh Mr Sharat Kumar H Mr Vikaas Mehrotra Mr Asutosh Tripathi Ghaziabad, Uttar Pradesh Mr Rahul Upadhyay Aligarh, Uttar Pradesh Mr Satish Kumar Ms Apurva Verma Etawah, Uttar Pradesh Mr Gopal Shenoy Mr Nandlal Vishvakarma Allahabad, Uttar Pradesh Mr Faizur Rahman Mr Rahul Yadav Ghaziabad, Uttar Pradesh Mr Rameez Raza

Kolkata, West Bengal Kolkata, West Bengal Kolkata, West Bengal Howrah, West Bengal Kolkata, West Bengal West Bengal Midnapore, West Bengal Nadia, West Bengal Purba Midnapore, West Bengal Rajasthan Pune, Maharashtra Pune, Maharashtra Pune, Maharashtra Pune, Maharashtra Mumbai, Maharashtra Mumbai, Maharashtra Mumbai, Maharashtra Mumbai, Maharashtra Mumbai, Maharashtra Ranchi, Jharkhand Bengaluru, Karnataka Bengaluru, Karnataka Bengaluru, Karnataka Bengaluru, Karnataka Bengaluru, Karnataka Gadag, Karnataka Gurgaon, Haryana Chennai, Tamil Nadu Chennai, Tamil Nadu Tiruchirapalli, Tamil Nadu Dinajpur, Bangladesh

#### Visakhapatnam

Mr Naman Arora	Uttaranchal	Mr Vijendra Baranwal	Uttar Pradesh	
Mr Alamgir Alam	West Bengal	Mr Mahendra Gowtham	Uttar Pradesh	
Mr Biju Mukherjee	West Bengal	Mr Meerajuddin Khan	Uttar Pradesh	
Ms Rupam Sinha	West Bengal	Mr Krishan Kumar	Uttar Pradesh	
Mr Bindibala Naorem	Manipur	Mr Sunil Kumar	Uttar Pradesh	
Mr Gangaraju Padam	Andhra Pradesh	Mr Mohammed Tariq	Uttar Pradesh	
Ms Jasmine Padmanabham	Kerala	Mr Vinodkumar Yadav	Uttar Pradesh	
Mr Arshad Mohd. Farook Shaikh	Gujarat			



## Low Vision and Rehabilitation (3 months)

Mr Mrityunjoy Ghosh Kolkata, West Bengal Mr Akshay Kumar Adilabad, Andhra Pradesh Mr Debtanu Dhar Asansol, West Bengal Ms Sailaja MVS Chennai, Tamil Nadu

## **Eye Banking Personnel Training Programs**

#### Eye Bank Technicians (3 months)

Mr B Ayyaswamy Kurnool, Andhra Pradesh Mr Raj Kumar Baral Nepal Mr Patan Taharulla Khan East Godavari, Andhra Pradesh Mr Sunil Kumar Sarkar Port Blair, Andaman & Nicobar Mr A Vijay Kumar Hyderabad, Andhra Pradesh Mr Jayesh C Parackal Angamaly, Kerala Chitrakoot, Madhya Pradesh Mr N Nanaji Kakinada, Andhra Pradesh Mr Manish Kanchani Ms C Sabitha Kurnool, Andhra Pradesh Mr Adiraj Santosh Patil Gulbarga, Karnataka Mr Pawar Rohidas Namdev Mr Jahir Burhan Siliguri, West Bengal Osmanabad, Maharashtra Mr Sunil Singh Jadon Ms Shazia Shaikh Mumbai, Maharashtra Jaipur, Rajasthan Mr Navratan Gurjar Jaipur, Rajasthan

### **Eye Donation Counsellors (I month)**

Ms Indu Bala Rohtak, Haryana Ms Gayatri Nayak Bhubaneswar, Orissa Mr Shivcharan Mehta Biratnagar, Nepal Ms Anupama Panda Bhubaneswar, Orissa Mr Shyam Narayan Port Blair, Andaman & Nicobar Mr Bijoy Kumar Patra Bhubaneswar, Orissa Kolkata, West Bengal Mr Jayesh C Parackal Ms Sudakshina Pandey Angamaly, Kerala

#### Eye Bank Managers (I week)

Mr Rajesh Gupta Indore, Madhya Pradesh Mrs Hepsiba Jawahar Madurai, Tamil Nadu
Mr Kamlesh Shukla Chitrakoot, Madhya Pradesh
Mr D B Nag Port Blair, Andaman & Nicobar

#### **Eye Bank Observers (Ophthalmologists)**

Dr Sean Socrates Dsilva Goa Dr Prashanth Karnataka
Dr P K Sethi Indore, Madhya Pradesh

# **Ophthalmic Nursing**

#### **Hyderabad**

Ms Girija Hyderabad Ms Ihansi Hyderabad Ms Rajitha Hyderabad Ms G Renuka Hyderabad Ms Kartheeka Madanapalle Ms Sandhya Madanapalle Madanapalle Ms Sabina Taj Ms Vishnu Priya Nellore Ms L Lakshmi Visakhapatnam Ms M D Rajeswari Visakhapatnam Ms B Ramalalitha Visakhapatnam Ms B Satya Sudha Visakhapatnam

#### Bhubaneswar

Ms Rojalin Lenka Orissa
Ms Rekharani Behera Orissa
Ms Rasmita Behera Orissa
Ms Niharika Khuntia Orissa
Ms Khyna Prava Samal Orissa
Ms Babani Mohanta Orissa
Ms Anupama Das Orissa

# **Support Staff**

Mr Sri Hari Hyderabad, Andhra Pradesh Ms E Eshwaramma Visakhapatnam, Andhra Pradesh Ms Anantha Lakshmi Hyderabad, Andhra Pradesh Mr B Ravi Kumar Visakhapatnam, Andhra Pradesh Mr Mustafa Hyderabad, Andhra Pradesh Mr O Srinivasa Rao Visakhapatnam, Andhra Pradesh Ms Nandini Hyderabad, Andhra Pradesh Mr S Ravi Visakhapatnam, Andhra Pradesh Mr Satish Ms Y Varalakshmi Hyderabad, Andhra Pradesh Visakhapatnam, Andhra Pradesh Mr Srinivas Hyderabad, Andhra Pradesh Ms Rita Rani Behera Bhubaneswar, Orissa Mr Litushree Pal Orissa

#### **Biomedical Technicians**

Mr Biranchi Narayan Moharana Bhubaneswar, Orissa

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# Community Eye Health & **Community Based Rehabilitation**

#### Master in Community Eye Health

(a collaborative programme with the University of New South Wales, Australia)

#### 2009

Mr Md Abdul Aleem Nalgonda, Andhra Pradesh Mr Ravi Burugu Warangal, Andhra Pradesh Mr Ch Ravi Kumar Adilabad, Andhra Pradesh Mr C Dattatri Rao Mahabubnagar, Andhra Pradesh Mr E Shiva Shanker Mahabubnagar, Andhra Pradesh East Godavari, Andhra Pradesh Mr B Subba Rao Mr G Balakrishna West Godavari, Andhra Pradesh Mr K Gopal Hyderabad, Andhra Pradesh Dr P Srinivasa Reddy Hyderabad, Andhra Pradesh Mr N Rajashekar Rao Ranga Reddy, Andhra Pradesh Mr A Harinath Nehru Medak, Andhra Pradesh

#### 2010

Mr Ramesh Chandra Bhatta Kailali, Nepal Dr Sumathi Matta Kurnool, Andhra Pradesh Mr Sreenivas N G S West Godavari, Andhra Pradesh Mr Satyanarayana S Guntur, Andhra Pradesh Mr Sreenivasa Rao Madala Ongole, Andhra Pradesh Mr Franklin Daniel S Hyderabad, Andhra Pradesh Hyderabad, Andhra Pradesh Dr Vasantha Suram

#### **Diploma in Community Eye Health (6 months)**

Mr Sanjeev Adhikari Rupandem, Nepal Mr Hari Bahadur Karki Kathmandu, Nepal Mr Dhanje Naik D Guntur, Andhra Pradesh Mr Mohan Kumar N Medak, Andhra Pradesh Mr V Chandra Sekhara Rao Srikakulam, Andhra Pradesh

Mr Sri Kumar B Ranga Reddy, Andhra Pradesh Mr Srihari Nath J Ranga Reddy, Andhra Pradesh Mr Pratap D Vizianagaram, Andhra Pradesh Mr Venkat Narsimlu N Nizamabad, Andhra Pradesh Mr Ramesh S Nalgonda, Andhra Pradesh

#### Diploma in Eye Health Management (1 year)

Mr Devichandar Rao C Mahaboobnagar, Andhra Pradesh Mr Partha Sarathy Gopalagary Hyderabad, Andhra Pradesh Mr Arun Babu Kagita

Guntur, Andhra Pradesh Guntur, Andhra Pradesh Mr Kishore Babu Kagita

Mr Guruprasad Minnakuri Mr Shaik Assemul Mogini Mr Pradeep Kumar T Mr Micah Philip

Prakasam, Andhra Pradesh Prakasam, Andhra Pradesh Adilabad, Andhra Pradesh Mulanthuruthy, Kerala

### Certificate Course in Program Management and Evaluation (2 weeks)

Ms Amba Anand New Delhi Mr Dharmendra Kumar Singh New Delhi New Delhi Dr Sydney Thyle

Dr Amarendra Deka Mr M Prakash Mr Shaik Mahaboob Sharief Shillong, Meghalaya Coimbatore, Chennai Hyderabad, Andhra Pradesh

#### Internship in Public Health (3 months)

Mr Rishabh Kaul Birla Institute of Technology & Science, Pilani

#### **U-Specs Project** (3 months)

Ms Pia Brodtrager

University of Vienna, Department of African Studies, Austria

#### Field Workers Training Program

#### Bhosle Gopal Rao Patel Eye Centre, Mudhol, Adilabad district

Mr Gadadhala Sayanna Puspur, Lokeshwam Coordinator

Mr Sonkamble Babu Rao Mudhol Community Eye Health Worker Mr Shiva Prasad Valgot Navipet, Nizamabad Community Eye Health Worker

#### Kuchukulla Ramachandra Reddy Eye Centre, Thoodukurthy, Mahaboobnagar district

Ms Toom Sunitha Polepally, Bijinapally Community Eye Health Worker Mr Komara Venkataiah Nakkalapally, Nagarkurnool Community Eye Health Worker

#### Venkata Lakshmi Eye Centre, Karamchedu, Prakasam district

Mr Madhava Rao Chadalawada Karamchedu Community Eye Health Worker Mr Suneetha Rao Ericherla Karamchedu Community Eye Health Worker



Seshanna Chennawar Eye Centre, Adilabad, Adilabad district

Mr Santosh Meshram Jainath, Adilabad Community Eye Health Worker Mr Mukkera Rakesh Jainath, Adilabad Community Eye Health Worker

Siloam Eye Centre, Madanapalle, Chittoor district

Mr Shaik Ameenulla Madanapalle Coordinator

Mr Subba Narasaiah Madanapalle Community Eye Health Worker

Swarna Bharat Eye Centre, Venkatachalam, Nellore district

Mr Ram Prasad Sharma L Thotapalli Gudur, Nellore Community Eye Health Worker Mr Chinnaiah Nalabalapu Kasumuru, Venkatachalam Community Eye Health Worker

Sudhakar & Sreekanth Ravi Eye Centre, Markapuram, Prakasam district

Mr Guravaiah Naidu Akula Akkamma Bavi Veedhi, Markapuram Community Eye Health Worker Mr Mohana Rao Kudumula ABM Palem, Markapuram Community Eye Health Worker

Sudhakar & Sreekanth Ravi Eye Centre, Kandukuru, Prakasam district

Mr Manohar Banala Oguru, Kandukuru Community Eye Health Worker
Mr Sundara Rao Ittadi Palukuru, Kandukuru Community Eye Health Worker

**Vision Centre Coordinators Exposure Course (I week)** 

Bhosle Gopal Rao Patel Eye Centre, Mudhol, Adilabad district

Mr Narsaiah Saggam Mudhol, Adilabad Vision Technician

Venkata Lakshmi Eye Centre, Karamchedu, Prakasam district

Mr Srinivasa Rao Yarllagadda Pedanandipadu, Prakasam Vision Technician

Seshanna Chennawar Eye Centre, Adilabad, Adilabad district

Mr Ilaiah Devi Mavala, Adilabad District Coordinator Mr Venkata Ramanaiah S Echoda, Adilabad Vision Technician

Sudhakar & Sreekanth Ravi Eye Centre, Markapuram, Prakasam district

Mr Santhosh Kumar Keshetty Markapuram, Prakasam District Coordinator

## **Central Audio-Visual Unit**

#### Awards for videos

Dr Swarup Medal, Andhra Pradesh State Ophthalmological Society (APSOS) annual meeting, Visakhapatnam. October 2-4, 2009

Loop myopexy for the management of strabismus fixus - Dr Ramesh Murthy, Dr Sunayana Hegde

First Prize, 19<sup>th</sup> Glaucoma Society of India meeting, Bengaluru. November 6-8, 2009 Deep sclerectomy with CO<sub>2</sub> – Dr Sirisha Senthil

Player of the Innings and Player of the Match Award, Hyderabad Ophthalmic League, Focus 2009, Swarup Eye Centre, Hyderabad. November 13, 2009

An extraordinary foreign body - Dr Milind Naik

It was an honor for the Central Audio Visual Unit that eight videos were accepted at the American Academy of Ophthalmology 2009 annual meeting and four were selected for "Front Row View Series – 4 video collections of eye surgery" DVD.

#### Videos Produced - 42

- Simultaneous trabeculectomy and scleral fixated IOL implantation in the management of unilateral aphakia and co-existing glaucoma – Dr Sirisha Senthil
- Management of intraoperative and postoperative complications with Ahmed glaucoma valve implant — Dr Sirisha Senthil
- Phototherapeutic keratectomy and amniotic membrane grafting (AMG) in spheroidal degeneration – Dr Varsha M Rathi, Dr Somasheila Murthy
- Extraordinary Foreign Body Dr Milind Naik
- A First "Namaste" to Eye Care Dr Gullapalli N Rao, Dr Usha Raman, Mr Vilas Kovai
- Superior Oblique Tendon Expander Dr Ramesh Murthy, Dr Santosh G Honavar
- Lamellar Keratoplasty: Struggles, Mishaps and Remedies Dr Rishi Swarup, Dr Prashant Garg
- Peripheral ulcerative keratitis: an enigma for clinicians Dr Virender S Sangwan
- DSAEK: Heartstoppers! Dr Pravin K Vaddavalli
- ➤ Small incision cataract surgery in nanophthalmos A safe and cost-effective technique Dr Anil K Mandal
- Ocular surface squamous neoplasia: tips and tricks Dr Savari Desai, Dr Santosh G Honavar
- Inferior oblique weakening procedures Dr Ramesh Murthy
- > Teleophthalmology Mr G Surendra, Dr Usha Raman
- Carbon dioxide (CO<sub>2</sub>) laser deep sclerectomy Dr Sirisha Senthil
- ➤ Manual small incision cataract surgery combined with trabeculectomy Dr Sirisha Senthil

- Community-based rehabilitation for multiple categories of disability – Ms Beula Christy
- Food hygiene: essential practices Ms Shobha Mocherla, Dr Chitra Kannabiran
- Essential practices in cafeteria: hygiene in food service: poem
   Ms Shobha Mocherla
- To Sir, With Love Dr Santosh G Honavar
- ORBIS-supported Paediatric Ophthalmology Learning and Training Centres
- The International Training and Resource centre for Eye Banking and Corneal Transplantation
- Corneal excision
- The day of my surgery: information for surgical patients (Telugu)
- My turn: information for outpatients (Telugu)
- UFO hits the eye: intra-retinal foreign body Dr Annie Mathai
- Nine public service announcements were produced with film stars and celebrities to increase awareness about retinoblastoma eye cancer in children. They were:
  - Akkineni Nageswara Rao, veteran Telugu film actor
  - Amala Akkineni, animal rights activist and former Telugu film actress
  - G Krishna, veteran Telugu film actor
  - G Vijaya Nirmala, Telugu film actress and Guinness record holder
  - Pinky Reddy, socialite (Telugu, English)
  - Prabhaas, Telugu film actor
  - Puri Jagannath, Telugu film director
  - Shilpa Reddy, Mrs India 2005 (Telugu, Hindi, English)
  - Sonu Sood, Telugu film actor (Hindi, English)



# **Eye Research**

Nowhere is the connection between medical microbiology and community eye health seen and felt as keenly perhaps as it is at the Prof Brien Holden Eye Research Centre. Work in our laboratories sometimes translates into direct benefits in community level diagnostics and care but, at other times, it feeds into the growing body of knowledge on eye disease and its management. This year saw steps forward in our understanding of the genetics of glaucoma and retinoblastoma, stem cell growth and differentiation, and the biochemical basis of cataract. New areas of exploration continue to be added; notably, this year, an independent laboratory to investigate development of vision in infants.



## Prof Brien Holden Eye Research Centre

- Champalimaud Translational Centre for Eye Research
- Kallam Anji Reddy Molecular Genetics Laboratory
- Sudhakar & Sreekanth Ravi Stem Cell Biology Laboratory

Research at LV Prasad Eye Institute is conducted through its constituent arm, the Hyderabad Eye Research Foundation (HERF), which is recognized by the Indian Government's Department of Scientific and Industrial Research (DSIR) as a Scientific and Industrial Research Organization (SIRO). HERF continues to compete for and receive grants from all over the world to conduct cutting edge research on the eye. The Prof Brien Holden Eye Research Centre (BHERC) investigates the causes and treatment strategies through its various components, namely the Champalimaud Translational Centre (C-TRACER), the Jhaveri Microbiology Centre, the Saroja A Rao Immunology Laboratory, the Kallam Anji Reddy Molecular Genetics Laboratory, the Sudhakar and Sreekanth Ravi Stem Cell Biology Laboratory, the Ophthalmic Pathology Laboratory, and the clinical research laboratories. Each of these components has been named after its donor, in recognition of their generous support.

#### Support and recognition

Research at HERF is focused on:

- a) the molecular and functional genomics of inherited and complex eye diseases,
- b) devising molecular diagnostics for early detection and seeking targets where effective intervention can occur,
- c) microbiology of eye infections, and
- d) stem cell technology applied to some eye disorders.

Support for these projects have come from competitive grants received from the Department of Biotechnology (DBT), Department of Science and Technology (DST), Council of Scientific & Industrial Research (CSIR), and the Indian Council of Medical Research (ICMR) – all from India, as well as the National Eye Institute (NEI, National Institutes of Health), USA. Thanks to the recently formalized US – India eye research collaboration, some joint research projects have been initiated at HERF with researchers in the US.

Likewise, collaborative research has been initiated with colleagues in Australia, Canada, Japan, Brazil and Tunisia through the DBT-sponsored bilateral Indo-Australian and Indo-Canadian programs and the DST-sponsored India-Japan, Indo-Tunisian and Indo-Brazilian programs. In addition, HERF is one of the four pillars of the multinational research and development group called

- Jhaveri Microbiology Centre & Saroja A Rao Immunology Laboratory
- Biochemistry Laboratory
- Ophthalmic Pathology Laboratory
- Clinical Research

Vision Cooperative Research Centre (operating from Sydney, Australia), and conducts research on its behalf on a series of clinical studies such as antibacterial contact lenses and corneal onlays. The Institute is recognized as an external research centre by the University of Hyderabad, Hyderabad; Birla Institute of Technology & Science (BITS), Pilani; and the University of New South Wales, Sydney, Australia. This enables research scholars from LVPEI to register with, and obtain their Ph D degrees from these universities. Collaborative research has also been forged with colleagues at the Centre for Cellular & Molecular Biology (CCMB), Centre for DNA Fingerprinting & Diagnostics (CDFD), and University of Hyderabad - all in Hyderabad, at the Indian Institute of Science, Bangalore, and Indian Statistical Institute (ISI), Kolkata. These have allowed researchers at LVPEI to access state of-the-art equipment and sophisticated facilities at these institutions.

#### **Clinical Research**

LVPEI's multidisciplinary clinical research is of international standards and is sponsored by Indian funding agencies and multinational companies from USA and France. The group conducts not only intramural clinical research, but also participates in multicenter clinical trials. Each clinical research project and trial goes through a rigorous examination by an independent Institutional Review Board (IRB), for its scientific and ethical aspects and only those that are approved are taken up. Clinical research has also focused on the suitability of using extended wear contact lenses. This involves recruitment of volunteers and monitoring comfort levels and related factors upon the use of contact lenses over a period of time. Another area of study is the efficacy, pharmacodynamics and related features of ophthalmic drugs and antibiotics. Many of the studies are conducted in collaboration with leading pharmaceutical companies.

#### **Champalimaud Translational Centre**

The Champalimaud Translational Centre for Eye Research has been set up at LVPEI in January 2008. The Champalimaud Foundation, based in Lisbon, Portugal, was set up on the bequest of the late Portuguese entrepreneur and philanthropist, António de Sommer Champalimaud. The Foundation has a long-term commitment to support medical research, in particular neurology, oncology and vision sciences. The Champalimaud Foundation and L V Prasad Eye Institute have agreed on the development



of a vast program of translational research through the establishment of the Champalimaud Translational Centre for Eye Research or C-TRACER.

Research at C-TRACER will focus on the following areas:

- · Advanced molecular and functional genomics;
- Research and therapy through the utilisation of stem cells in vision-related illnesses;
- Translational research utilising existing and novel clinical methodologies for furthering the knowledge of vision in ways that can be readily applied to patients;
- Exchange programs involving scientists chosen by LVPEI and the Champalimaud Foundation;
- Introduction of capacity building programs for developing Lusophone countries such as Mozambique, Angola, Timor and others; and
- The organization of the Antonio Champalimaud Symposium on January 30<sup>th</sup> every year in which leaders in ophthalmology from across the world, as well as distinguished scientists from India, are invited to lecture.

Third Annual Antonio Champalimaud Symposium was held on January 30, 2010. The Champalimaud Keynote Oration on 'Glaucoma genetics: past, present and future' was delivered by Dr Janey L Wiggs from the Department of Ophthalmology, Harvard Medical School, Massachusetts Eye and Ear Infirmary, Boston, MA, USA. This was followed by a talk on 'Angle closure: mechanisms and issues in screening' by Dr David S Friedman from The Wilmer Eye Institute, The Johns Hopkins University School of Medicine, Baltimore, MD, USA. Dr Borja Corcostegui, Director, Instituto de Microcirugia Ocular de Barcelona, speaking in a videoconferencing from Barcelona, Spain, gave an 'Update in surgical treatment of proliferative diabetic retinopathy', while Prof Brien A Holden of the Institute for Eye Research, University of New South Wales, Sydney, Australia, spoke on 'Myopia'.

With the establishment of C-TRACER, the Champalimaud Foundation will work towards the prevention, treatment and eradication of vision-related illness in India and some other parts of the world.

## Research scholars at the Prof Brien Holden Eye Research Centre

Kallam Anji Reddy Molecular Genetics Laboratory Hardeep Pal Singh, Maithili D V N, Neeraja Sharma Cherukupalli, Vidya Latha Parsam, Surya Prakash Goud Ponnam, Rachna Shukla, K Nageswara Rao, B Mounika, Rachana Akula, Srinivasa Rao Sripathi, Saritha Katta, Ganeswara Rao, M Gayathri, Sonika Rathi, Srujana Nagireddy, Nishika Sahini

**Ophthalmic Pathology Laboratory**Guru Prasad Manderwad

# **Sudhakar & Sreekanth Ravi Stem Cell Biology Laboratory**

Purushotham Reddy, Naresh Polisetti, Murali Mohan Sagar, Shubha Tiwari, Subhash Gaddipati, Savitri Maddileti, Subba Rao M, Rohini Nair, Vasundhara Vauhini, Mangalangi U

Research Biochemistry Laboratory
Venkata Pulla Rao, Madhavi Latha Chalasani

Jhaveri Microbiology Centre Praveen Kumar Balne, Sanyasi Rao

### LVPEI, Bhubaneswar

Ocular Microbiology Service Sarita Kar

#### PhDs awarded in 2009

Madhavi Latha Chalasani (University of Hyderabad) Kalyana Chakravarthi (University of Hyderabad) Hardeep Pal Singh (Birla Institute of Technology & Science, Pilani)

## **Hyderabad Eye Research Foundation**

#### **Ethics Committee**

#### Chair

Justice T N C Rangarajan

Former Judge, High Courts of Madras and Andhra Pradesh

Hyderabad

#### **Member Secretary**

Dr Ajit Babu Majji

Ophthalmologist, L V Prasad Eye Institute

Hyderabad

#### **Members**

Dr Geeta K Vemuganti

Scientist, L V Prasad Eye Institute

Hyderabad

Dr Subhabrata Chakrabarti

Scientist, L V Prasad Eye Institute

Hyderabad

Dr Usha Raman

Consultant, Communications, L V Prasad Eye Institute

Hyderabad

Ms Gayathri Ramachandran

Retired IAS officer

Hyderabad

Dr Madhukar Reddy

Ophthalmologist, Drishti Eye Clinic

Hyderabad

Dr Nuzhat Aziz

Obstetrician, Fernandez Hospital Pvt Ltd

Hyderabad

Dr Roy Verghese

Consultant physician, Elbit Diagnostics

Hyderabad

#### **Research Advisory Board**

Prof Dipankar Chatterji

Molecular Biophysics Unit

Indian Institute of Science, Bangalore

Dr Alka Sharma

Joint Director, Department of Biotechnology

New Delhi

Dr Anuradha Lohia

CEO, Wellcome Trust – DBT India Alliance

Hyderabad

Dr Ch Mohan Rao

Director, Centre for Cellular & Molecular Biology

Hyderabad

Dr Seyed E Hasnain

Vice Chancellor, University of Hyderabad

Hyderabad

Lt Gen D Raghunath

Principal Executive

Sir Dorabji Tata Centre for Research in Tropical Medicine

Indian Institute of Science Campus, Bangalore

Dr Ghanshyam Swarup

Scientist, Centre for Cellular & Molecular Biology

Hyderabad

Prof D Balasubramanian

Director of Research, L V Prasad Eye Institute

Hyderabad



## **Research Projects**

# Kallam Anji Reddy Molecular Genetics Laboratory and Champalimaud Translational Centre for Eye Research (C-TRACER)

Genetic evaluation of factor B and complement component C2 in the susceptibility to age related macular degeneration

**Investigators**: Inderjeet Kaur, Rajeev K Reddy, Saritha Katta, Raja Narayanan, Annie Mathai, Ajit B Majji, Subhabrata Chakrabarti

Support: Department of Science and Technology, India

Age related macular degeneration (AMD) has been implicated to multiple variations in several complement factor genes. Factor B (CFB) and component C2 genes are located in the major histocompatibility complex class III region (6p21) and are found to be expressed in the neural retina, retinal pigment epithelium (RPE) and choroids. Our study results have indicated that SNPs in C2 and CFB gene appear to confer significant protection to AMD in India. Also, we found a potential risk haplotype within an extended region of CFH (without Y402H) with AMD susceptibility in the Indian cohort.

# Establishing a "risk assessment chip" for the eye disease age related macular degeneration

**Investigators**: Subhabrata Chakrabarti, Raja Narayanan, Rajeev K Reddy, Inderjeet Kaur, Paul N Baird, Robyn H Gyner **Support**: Indo-Australia Biotechnology Fund, Department of Biotechnology, India

AMD is the most frequent cause of blindness in Australia and has been recognized as an increasingly major cause of blindness in India. AMD is now known to have strong genetic as well as environmental risk factors, the latter including smoking, diet, inflammatory factors and vascular parameters. Discovery of the CFH gene and other susceptibility genes have led to a renewed push to identify those gene variants as well as explore geneenvironmental interactions associated with the disease. This project seeks to identify variants through genomewide association study (GWAS) using high density SNP and copy umber microarray that would accurately identify disease risk across different ethnic groups in Australia and India. The outcomes would help to offer targeted treatment options to the susceptible patients thereby improving their quality of life and reducing the burden of AMD in the wider community.

# Genetic and phenotypic comparison of primary congenital glaucoma in India and Brazil

**Investigators**: Subhabrata Chakrabarti, Anil K Mandal, Ivan M Tavares,<sup>2</sup> Jose P C Vasconcellos,<sup>3</sup> Monica Mello<sup>3</sup>

**Support**: Department of Science and Technology, India (Indo-Brazil collaborative program) Primary congenital glaucoma (PCG) results in an irreversible blindness in children and is largely attributed to mutations in the CYPIBI gene. While the estimates of mutation frequencies vary widely across populations, there are subtle commonalities with respect to the prevalent mutation among different populations on a uniform haplotype background as evidenced from the mutation spectrum among PCG patients from Brazil and India. The present study would try to unravel the similarities and dissimilarities in the genetic basis of PCG among the Brazilian and Indian patients and understand the origin and migration of the mutations across these populations.

#### Central India eye & medical study

**Investigators**: Subhabrata Chakrabarti, Jonas Jost,<sup>4</sup> Vinay Nangia,<sup>5</sup> Inderjeet Kaur

Support: University of Heidelberg, Germany

The Central India Eye and Medical Diseases (CIEMS) is a large population study in a rural central Indian region (Nagpur) on 5000 individuals above 40 years of age. This study aims to understand the prevalence of various eye and other systemic diseases in this population. As part of this study, we would characterize the genetic risk factors in this population for the prevalent eye diseases based on whole genome and candidate gene screening, genotype-phenotype correlation and gene-environment interactions.

# Genetic comparison of primary congenital glaucoma in India and Tunisia – Understanding the possible founder effects

**Investigators**: Subhabrata Chakrabarti, Anil K Mandal, Guemira Fethi,<sup>6</sup> E A Mhd Ali,<sup>7</sup> Douik Hayet,<sup>7</sup> G Abderraouf,<sup>8</sup> Harzallah Latifa,<sup>8</sup> Bouassida Jihene<sup>8</sup>

**Support**: Department of Science and Technology, India (Indo-Tunisia collaborative program)

Primary congenital glaucoma (PCG) attributed to mutations in the CYPIBI gene affects different populations worldwide. These mutations exhibit a strong geographical clustering based on a uniform haplotype background as evidenced from the mutation spectrum among PCG patients in Morocco, Saudi Arabia and India. So far, there are no reports on the genetics of PCG in Tunisia. The present study would try to unravel the similarities and dissimilarities in the genetic basis of PCG in Tunisian and Indian patients and understand the origin and migration of common mutations across these two populations.

<sup>1</sup>Centre for Eye Research Australia (CERA), University of Melbourne, Australia ◆ <sup>2</sup>Vision Institute, Federal University of Sao Paolo, Brazil ◆ <sup>3</sup>Campinas State University, Sao Paolo, Brazil ◆ <sup>4</sup>Department of Ophthalmology, University of Heidelberg, Manheim, Germany ◆ <sup>5</sup>Suraj Eye Institute, Nagpur, India ◆ <sup>6</sup>Institut Salah Azaiz, Tunis, Tunisia ◆ <sup>7</sup>Service d'Ophthalmologie, Habib Thameur Hospital, Tunis, Tunisia ◆ <sup>8</sup>Service de Biologie Clinique, Institut Salah Azaiz, Tunis, Tunisia

# Developing a global blueprint for zero PCG: Understanding the molecular basis of PCG

Investigators: Subhabrata Chakrabarti, Partha P Majumder, Luba Kalaydijeva, Inderjeet Kaur, Anil K Mandal, K Narayanasamy, Jamie Craig, Ivailo Tournev, Silvia Cherninkova

**Support**: Indo-Australia Biotechnology Fund, Department of Biotechnology, India

In continuation to the ongoing genetics work in PCG, the present study is based on identifying the n characterized genes in PCG through the model of human evolution. The premise is based on the background of the evolution and migration of gypsies from India. The cohort comprises an isolated population (gypsies) derived from an ancestral population (Indian), which was founded in the recent timescale of evolution, as a result of which it would have undergone a minimum number of genetic recombinations. Gypsy patients exhibit 20% CYPIBI mutations in PCG, while it is around 40% for Indian patients. The study employs a GWAS in PCG cases and controls in both the cohorts using the 1.8 million SNP Affymetrix array. We plan to derive the regions of shared haplotypes across the genomes and identify the conserved regions between these two groups, which would harbor mutations in gene(s) causing PCG.

#### **Genetics of retinal dystrophies**

**Investigators**: Chitra Kannabiran, Hardeep Singh, Rachna Shukla, Subhadra Jalali, R Narayanan

**Support**: Champalimaud Foundation, Portugal, Department of Biotechnology, India

Retinal dystrophies are degenerative disorders of the retinal photoreceptors resulting in irreversible blindness. They are caused by single gene defects and are extremely heterogeneous in genetic causation. We are studying the genetics of different types of dystrophies including congenital (LCA) and later-onset forms. Mapping and candidate gene screening have led to identification of novel mutations in genes for autosomal recessive retinal dystrophy in a few families. Screening of candidate genes in Lebers congenital amaurosis (LCA) is being done to determine the major causes of LCA in the Indian population.

#### Novel causes of congenital hereditary cataract

**Investigators**: Chitra Kannabiran, Surya Prakash G Ponnam, Ramesh Kekunnaya, Jyoti Matalia, Sushma Tejwani, BSR Murthy.

**Support**: Council of Scientific and Industrial Research, India **Collaborators**: Ghanshyam Swarup,<sup>6</sup> Linda Musil<sup>7</sup>

Congenital hereditary cataracts occur in infants and children and are inherited as single gene defects commonly through autosomal dominant and recessive modes of inheritance. We carried out a genetic screen of several known genes for hereditary cataract in several families with autosomal forms of cataract. Interesting pathogenic mutations were found in gap junction and lens membrane protein genes. These are being studied further using molecular and cell biologic approaches for changes in the properties of the protein to understand the basis for cataract.

# Characterization of the SLC4AII gene responsible for corneal endothelial dystrophy

**Investigators**: Chitra Kannabiran, Neerja Sharma **Support**: Champalimaud Foundation, Portugal

Our previous studies involved mapping and identification of the causative gene for the recessive form of congenital hereditary endothelial dystrophy (CHED), a disease involving corneal opacities in infants and young children. The gene identified by ourselves and others was the sodium bicarbonate transporter-related gene, SLC4A11. We are studying the wild type and mutant proteins (found in CHED patients) encoded by this gene in order to understand its properties and its pathogenic basis usinf suitable experimental systems.

#### **Genetics of Retinoblastoma**

**Investigators**: Chitra Kannabiran, Vidya Parsam, Md Javed Ali, Santosh Honavar, Geeta Vemuganti

**Support**: Champalimaud Foundation, Portugal

Retinoblastoma is an intraocular malignancy involving the retinal precursor cells and affects children below the age of 5 yrs. It is caused by mutations in the RBI gene. We developed an effective screening protocol for retinoblastoma using patients' genomic DNA, that can potentially identify the oncogenic mutation in >80% of patients. We have also performed analysis of the RBI mRNA in patients to further detect changes that were not detectable in DNA analysis.

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## **Jhaveri Microbiology Centre**

Loop-mediated isothermal amplification method for the diagnosis of viral retinitis caused by Herpes Simplex, Varicella Zoster and Cytomegalo Viruses

**Investigators**: G Ashok Kumar Reddy, B Praveen Kumar, Inderjeet Kaur, Rajeev Kumar Reddy, Annie Mathai

Support: Department of Science and Technology, India

This project aims at developing a novel nucleic acid amplification method called loop-mediated isothermal amplification (LAMP) for the diagnosis of viral retinitis, caused by Herpes Simplex, Varicella Zoster and Cytomegalo Viruses. The most significant advantage of LAMP is the ability to amplify specific sequences of DNA under isothermal conditions between 63°C and 65°C, thereby obviating the need for a thermal cycler. Detection of the amplification is achieved simply by a change of color with the addition of SYBER green dye.

# Molecular characterization of nonsporulating flamentous fungi isolated from microbial keratitis

**Investigators**: G Ashok Kumar Reddy, Prashant Garg, Usha Gopinathan, Chitra Kannabiran

**Support**: Council of Scientific & Industrial Research, India

Microbial keratitis remains a leading cause of blindness worldwide. Among severe infective forms of keratitis, fungal keratitis is the most common in many developing countries like China, India, Ghana and Nepal. More than 105 species of fungi, classified in 56 genera, have been reported to cause mycotic keratitis. Of the different filamentous fungi isolated from mycotic keratitis there were a significant number of unidentified fungi due to lack of sporulation. Accurate identification of these fungi is essential for the selection of appropriate antifungal drugs for treating these infections. The aims of the study are to assess the species distribution of nonsporulating molds isolated from patients with mycotic keratitis by molecular methods and to study the treatment outcome of keratitis caused by nonsporulating molds.

# Sudhakar & Sreekanth Ravi Stem Cell Biology Laboratory and Champalimaud Translational Centre for Eye Research (C-TRACER)

Cultivation and characterization of human lacrimal gland cells for potential clinical application for post radiotherapy xerophthalmia

**Investigators**: Geeta K Vemuganti, Santosh G Honavar, Vijay Anand P Reddy<sup>1</sup>

Support: International Atomic Energy Agency, Austria

Dry eye condition due to failure or improper tear fluid secretion by lachrymal glands is a serious problem in patients undergoing radiation treatment for ocular tumors. With the aim of providing cell therapy for treating lacrimal gland dysfunction, our group has initiated work on culturing lacrimal gland cells using tissues that were harvested from patients undergoing exenteration. The preliminary results show that the lacrimal gland epithelial cells (LGEC) can be isolated from the source tissues by using a collagenase and hyaluronidase enzyme cocktail and can be cultured on denuded human amniotic membrane, matrigel and collagen. Further characterization of the cultured cells is in progress.

# Evaluation and characterization of cancer stem cells in retinoblastoma tumor

**Investigators**: Geeta K Vemuganti, Santosh G Honavar, Chitra Kannabiran

**Support**: Indian Council of Medical Research, India

It is believed that a tumor tissue originates from a mutated stem cell and these stem-like cancer cells could influence disease prognosis and response to therapy. This study attempts to identify stem-like cells present in retinoblastoma tumors by characterizing different subpopulations of cells based on their light scatter properties and differential marker expression by FACS analysis. Our results indicate the presence of two different cell types in Rb tumors. The small cells designated as FSC<sub>low</sub>/SSC<sub>low</sub> were positive for CD44 and negative for CD133, CXCR4 and CD90 and the large cells designated as FSC<sub>high</sub>/SSC<sub>low</sub> were positive for all the above markers. RT-PCR analysis revealed that the sorted FSC<sub>low</sub>/SSC<sub>low</sub> cells expressed high levels of retinal progenitor markers PROX1 and Syntaxin1A and therefore could represent the stem-like cells of Rb tumors.

# An advanced surface for the cell therapy of limbal epithelium for ocular surface disease: Proof of concept and clinical trials

**Investigators**: Virender S Sangwan, Indumathi M

**Support**: Department of Biotechnology, India (Indo-Australian collaborative program)

This project aims to produce surface modified therapeutic contact lenses for in vitro culture and delivery of limbal epithelial cells for the treatment of ocular surface diseases. The project also includes a 'proof of concept' clinical trial in order to establish the safety and efficacy of this technique in comparison to the established technique of corneal epithelial transplantation using the human amniotic membrane (hAM) as a culture substrate. The plasma polymer coating technique allows exact control

Efficiency

Consultant, Ocular Oncology, Apollo Hospitals, Hyderabad

over the film thickness and with an appropriate chemistry; we anticipate that this technique would offer a better alternative to hAM for culturing limbal epithelial cells and their subsequent delivery on to the corneal surface.

#### Generation of disease specific inducted pluripotent stem cells from dermal fibroblasts of patients with retinal dystrophy

**Investigators**: Indumathi M, Chitra Kannabiran, Subhadra Jalali, Milind Naik

Support: Department of Biotechnology, India

Retinal dystrophy is a genetic disorder and also an age related disease resulting in gradual degeneration of the photoreceptors and the RPE cells. Therefore, cell replacement therapy offers a great promise in treating such diseases. However, an adult human retina does not harbour any stem cells to regenerate the lost cells. This has initiated a search for suitable cell sources that can give rise to the retinal cells. Recently, it was shown that adult somatic cells can be reprogrammed to ES-like cells by ectopic expression of some of the genes implicated in stemness and pluripotency. These cells were christened as induced pluripotent stem cells (iPSCs). Our group has initiated basic research towards exploring the feasibility of using iPS cells generated from adult dermal fibroblast as a stem cell source for deriving retinal cells.

# A study of unilateral retinoblastoma with and without histopathologic high-risk features and the role of adjuvant chemotherapy – a groupwide phase 3 study

**Investigators**: Santosh G Honavar, Geeta K Vemuganti **Support**: National Childhood Cancer Foundation, USA

The objectives of the study are:

- a) To prospectively determine the prevalence of highrisk histopathologic features such as choroidal involvement, optic nerve invasion, scleral and anterior segment involvement in patients with unilateral retinoblastomas who had undergone enucleation;
- b) To demonstrate that patients without certain high-risk features can be successfully treated with enucleation alone by estimating the event-free survival (EFS) and

- overall survival (S) where an event is defined as the occurrence of extraocular or metastatic disease:
- c) To estimate the event-free survival (EFS) and overall survival (S) in patients with specific high-risk features who are uniformly treated with adjuvant chemotherapy where an event is defined as the occurrence of extraocular or metastatic disease; and
- d) To estimate the incidence of toxicities associated with the proposed adjuvant chemotherapy.

Expected outcomes: The event-free survival and overall survival distributions will be estimated for patients with high risk features (treated with adjuvant chemotherapy) and separately for subjects without high risk features (treated with enucleation alone). Toxicities associated with the adjuvant therapy for patients with high risk features will be descriptively summarized. The study is still in the active recruitment phase.

# Indian Council of Medical Research National Retinoblastoma Registry

**Investigators**: Santosh G Honavar, P M Fairooz **Support**: Indian Council of Medical Research, India

The objectives of the proposal are to develop a reliable database on retinoblastoma, record the magnitude of the problem, assess the efficacy of the treatment protocol and remission status and study the mortality rate.

The project is being done in a prospective fashion. All new patients diagnosed with retinoblastoma from April I, 2009, are being registered. Details of the patients are recorded manually by a research fellow in the proforma designed by ICMR. Then a data entry operator enters the data in a web page. The data is updated and edited periodically.

Applied value of the project: The project will enable researchers and clinicians to understand retinoblastoma and its clinical presentation in the Indian scenario, which is different from that in western literature. The data collected at the end of one year across the country will open up new avenues for research, while increasing awareness about any shortcomings in the diagnosis and management of retinoblastoma, thus helping in salvaging more eyes.

## Research in Biochemistry

#### Study of the role of vitreous liquefaction in agerelated nuclear cataract

Investigators: D Balasubramanian, Pravin V Krishna

**Support**: Department of Biotechnology, India (US-India collaborative eye research program)

This is the Indian component of a US-India collaborative study, The US part is being done by Dr David Beebe's group. The goal of this collaborative study is to determine whether nuclear cataracts are associated with increased degeneration of the vitreous body in Indian patients, as they are in patients from the US. At the same time, this

study will establish whether or not the brunescent nuclear cataracts, as found in India, have a similar association with the degeneration of the vitreous body. Degeneration of the vitreous body of the eye is a major risk factor for nuclear cataracts. These finding are consistent with the well-known association between the loss of vitreous structure during vitrectomy and nuclear cataracts, and indicates that the gel structure of the vitreous body protects the lens from nuclear cataracts. These studies are being conducted using essentially the same methods as in Harocopos et al. 2004, with some improvements in instrumentation.



# Program support on translational research on eye diseases

**Investigators**: D Balasubramnian, Chitra Kannabiran, Geeta K Vemuganti, Subhabrata Chakrabarti, Inderjeet Kaur

**Support**: Department of Biotechnology, India (Program support grant)

India has about 15 million people who are blind. Of these, about 10 million are cataract blind, about 1.2 million are blind due to uncorrected refractive errors, and another 1.0 million due to infection of the eye. All these are easily managed through effective national level programs since, in each of these cases, ready and effective solutions are available, and no new research is needed. But the rest of the blindness burden is due to corneal dystrophies, glaucoma, retinal disorders and inherited problems. In these instances, basic research and its application and translation are badly needed. Fortunately, the status of research in these areas in India is of the same level and quality as elsewhere, and the connection between basic researchers and clinicians is good and mutually productive, particularly in ophthalmology. We need to take advantage of this combination and hence the need for translational research on eye diseases.

The program has the following R&D projects: **Focal Theme 1**: Stem Cell Biology and Therapy

Project A: Establishment of a centre for

translational research in stem cells

Focal Theme 2: Molecular Genetics of Ocular Diseases

Project B: Translational research in the genetics

of retinal diseases

Project C: Molecular genetic study of retinopathy

of prematurity

Project D: Identifying candidate genes associated

with raised intraocular pressure in

primary open angle glaucoma

Project E: Molecular phenotyping of genetic

mutations leading to eye disorders

- functional studies on the

disorderassociated proteins

# Functional analysis of the glaucoma-associated protein optineurin

**Investigators**: D Balasubramanian, Subhabrata Chakrabarti, Ghanshyam Swarup

Support: Department of Biotechnology, India

Optineurin is a multifunctional protein involved in several functions such as vesicular trafficking from the Golgi to the plasma membrane, NF-B regulation, signal transduction and gene expression. Mutations in optineurin are associated with glaucoma, a neurodegenerative eye disease that causes blindness. Genetic evidence suggests that the E50 K (Glu50Lys) is a dominant disease-causing mutation of optineurin. However, functional alterations caused by mutations in optineurin are not known. Earlier, we had shown that the mutant E50K induces retinal ganglion cell

death through oxidative and apoptotic mechanisms. In an effort to understand the cell biology of the process, we have analyzed the role of optineurin in endocytic recycling and the effect of E50K mutant on this process.

During the year, we have been able to show that siRNA-mediated knockdown of optineurin impairs trafficking of transferrin receptor to the juxtanuclear region. A point mutation (D474N) in the ubiquitin-binding domain abrogates localization of optineurin to the recycling endosomes and interaction with transferrin receptor. Our results suggest that optineurin regulates endocytic trafficking of transferrin receptor to the juxtanuclear region. The E50K mutant impairs trafficking at the recycling endosomes due to altered interactions with Rab8 and transferrin receptor. These results have implications for the pathogenesis of glaucoma caused by the E50K mutation because endocytic recycling is vital for maintaining cellular homeostasis.

# Structural basis and physiological consequences of congenital nuclear cataracts in humans, associated with mutations in human gamma-D-crystallin

**Investigators**: D Balasubramanian, Prof N Srinivasan<sup>1</sup>

**Support**: Department of Biotechnology, India (Program support grant)

Many human congenital cataracts arise from mutations in the lens proteins, crystallins. We focus on human gamma-D-crystallin, particularly because over 16 mutations are known here, and they neatly group into one group that leads to cortical, peripheral and similar cataracts, which are associated with mutations in the N-terminal domain (N-tD) of the molecule, and the second groups where mutations are in the C-terminal domain (CtD), which are associated with nuclear cataracts. Of the two types of cataracts (nuclear and peripheral), nuclear cataract blocks the central vision of the infant, causing impairment of the development of the eye and the visual system of the growing child, thus requiring the earliest possible intervention.

The questions we ask are: what is the structural rationale behind this interesting dichotomy of N-tD mutants leading to peripheral and C-tD mutants nuclear cataracts, and what are its functional and physiological consequences? Gamma crystallins are known to have two biochemical functions. One is their ability to bind to and sequester calcium ions, and thus inhibit free Ca ions from initiating protein and nucleic acid degradation in situ. The other is to induce the production and release of the growth factor called ciliary neurotrophic factor or CN TF, an important development-relevant factor in the eye. We thus cloned, expressed and isolated pure wild type human gamma-D-crystallin and its N-tD mutant P23T, and C-tD mutants E107A, R140X and W157X, and compared their solution state conformations (secondary and tertiary structures) and their Ca ion binding abilities. We have also done extensive in silico modeling of these proteins,

Efficiency

<sup>&</sup>lt;sup>1</sup>Indian Institute of Science, Bangalore

and assessed their aggregational properties in vitro and also in situ in lens epithelial cells.

We find a clear distinction between the properties of the N-tD mutant and the C-tD mutants. While the N-tD maintains the chain conformation of the wild type, and also binds Ca ions just as well as the wild type, each one of the C-tD mutant is seen to lose its chain order (the 'greek key' motif) in the C-terminal domain. This causes the C-tD mutants to form light-scattering aggregate particles, and also to lose the Ca binding ability. We are currently studying their relative abilities to induce CN TF.

## Ocular Microbiology Service, LVPEI, Bhubaneswar

Ocular infections caused by *Staphylococcus* species: Study of clinico-microbiologic features, virulence markers and genome profile

Investigators: Savitri Sharma, DV Singh<sup>1</sup>

Support: Department of Science and Technology, India

Staphylococci are normal flora in the conjunctiva and at the same cause a variety of eye infections. This project aims to determine the clinical profile of various ocular infections caused by different species of *Staphylococcus*, identify *Staphylococcus* species causing ocular infections by phenotypic methods, determine antibiotic susceptibility of the clinical isolates of staphylococci from ocular infections

and normal eyes, determine virulence factors of the clinical isolates of staphylococci from ocular infections and from normal eyes, perform genetic profiling of methicillin sensitive and resistant *Staphylococcus* species and compare clinical, phenotypic and genotypic features of methicillin sensitive and resistant *Staphylococcus* species. Sixty staphylococcal isolates from clinical samples and 35 isolates from normal individuals have been characterized phenotypically using ATB system and their antibiotic susceptibility has been tested by minimum inhibitory concentration of number of antibiotics. Currently, the isolates are being tested for the presence of *mecA* gene that determines methicillin resistance.

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## **Basic Research Projects**

Name of the Project	Project Investigators	Supported by	Duration
Genetic evaluation of factor B and complement component C2 in the susceptibility to age related macular degeneration	Dr Inderjeet Kaur	Department of Science & Technology, India	2007-2010
Program support on translational research on eye diseases	Project A: Dr Geeta K Vemuganti Project B: Dr Chitra Kannabiran Project C: Dr Inderjeet Kaur Project D: Dr Subhabrata Chakrabarti Project E: Prof D Balasubramanian	Department of Biotechnology, India	2007-2012
Establishing a "risk assessment chip" for the eye disease age-related macular degeneration	Dr Subhabrata Chakrabarti Dr Inderjeet Kaur Dr Paul N Baird <sup>1</sup>	Department of Biotechnology, India	2007-2010
Novel causes of congenital hereditary cataract	Dr Chitra Kannabiran	Council of Scientific & Industrial Research, India	2007-2010
Loop mediated isothermal amplification method for the diagnosis of viral retinitis caused by herpes simplex varicella zoster and cytomegalo viruses	Dr Ashok Kumar Reddy	Department of Science & Technology, India	2008-2011
Cultivation and characterization of human lacrimal gland cells for potential clinical application for post radiotherapy xerophthalmia	Dr Geeta K Vemuganti Dr Santosh G Honavar Dr Vijay Anand P Reddy²	International Atomic Energy Agency, Austria	2008-2012
Study of the role of vitreous liquefication in age-related nuclear cataract	Prof D Balasubramanian Dr Pravin V Krishna	Department of Biotechnology, India	2009-2011
An advanced surface for the cell therapy of limbal epithelium for ocular surface disease: Proof of concept and clinical trials	Dr Virender S Sangwan Dr Indumathi Mariappan	Department of Biotechnology, India	2009-2012
Developing a global blueprint for zero PCG	Dr Subhabrata Chakrabarti Prof Partha P Majumdar³ Prof Luba Kalaydijeva⁴	Department of Biotechnology, India	2008-2011
Molecular characterization of nonsporulating flamentous fungi isolated from microbial keratitis	Dr Ashok Kumar Reddy	Council of Scientific & Industrial Research, India	2009-2012
Evaluation and characterization of cancer stem cells in retinoblastoma tumor	Dr Geeta K Vemuganti	Indian Council of Medical Research, India	2009-2010
Genetic and phenotypic comparison of primary congenital glaucoma in India and Brazil	Dr Subhabrata Chakrabarti Dr Ivan M Tavares <sup>5</sup> Dr Monica Mello <sup>6</sup>	Department of Science & Technology, India	2009-2011
Central India Eye & Medical Study	Dr Subhabrata Chakrabarti Dr Jonas Jost <sup>7</sup>	University of Heidelberg, Germany	2009 onwards
Genetic comparison of primary congenital glaucoma in India and Tunisia – understanding the possible founder effects	Dr Subhabrata Chakrabarti Prof G Fethi <sup>8</sup>	Department of Science & Technology, India	2009-2011
Generation of disease specific inducted pleuripotent stem cells from dermal fibroblasts of patients with retinal dystrophy	Dr Indumathi Mariappan	Department of Biotechnology, India	2009-2011
Ocular infections caused by Staphylococcus species: Study of clinico-microbiologic features, virulence markers and genome profile	Dr Savitri Sharma Dr DV Singh <sup>9</sup>	Department of Science & Technology, India	2009-2012
Phenotypic & genotypic characterization of limbal stem cells, cultivated limbal epithelial cells and persistence of these characteristics after clinical transplantation	Dr Geeta K Vemuganti Dr Virender S Sangwan Prof D Balasubramanian	Department of Biotechnology, India	2006-2009
Molecular mechanisms of pathogenesis of glaucoma caused by mutations in optineurin	Prof D Balasubramanian Dr Ghanshyam Swarup <sup>10</sup> Dr Subhabrata Chakrabarti	Department of Biotechnology, India	2009-2012
Characterization of cultivated oral mucosal epithelial cells and its application for reconstructing the ocular surface in patients with severe ocular surface disease	Dr Geeta K Vemuganti Dr Santosh G Honavar Dr Virender S Sangwan	Department of Biotechnology, India	2007-2009

[Operations Research (community eye care) table in ICARE section, page 49]

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# **Clinical research projects**

Name of the Project	Project Investigators	Supported by	Duration
A randomised double-masked active controlled phase 3 study of the efficacy, safety and tolerability of repeated doses of intravitreal VEGF trap-eye in subjects with neovascular age related macular degeneration (AMD) VEGF TRAP study	Dr Raja Narayanan	Bayer HealthCare, Germany	2008-2011
The treatment of fungal corneal ulcer with Povidone - Iodine 1.25% ophthalmic solution. A comparative clinical trial	Dr Prashant Garg Dr Savitri Sharma	University of California, Los Angeles, USA	2008 onwards (Hyderabad and Bhubaneswar campuses)
Comparative, randomized, open trial on the anti-inflammatory efficacy of diclofenac released from an intra ocular lens versus administration of 0.1% diclofenac eye-drops in the prevention of post operative inflammatory manifestations after cataract surgery. – Ancillary study: I year follow-up of the safety	Dr Virender S Sangwan	IOL Tech Carl Zeiss MediTec, France	2006-2011
A retrospective analysis of long-term outcome of primary angle closure glaucoma patients treated with peripheral iridotomy	Dr Sirisha Senthil	Pfizer, USA	2009-2011
Micro current stimulation for retinitis pigmentosa 650 device pilot study	Dr Subhadra Jalali	ScyFix, USA	2007-2010
A phase 2/3 randomised, controlled double-masked multi-center comparitive trial in parallel groups to compare the safety and efficacy of intravitreous injections of 0.3 mg pegaptanib sodium (Macugen) given as often as every 6 weeks for 2 years, to sham injections in subjects with Diabetic Macular Edema (DME) involving the center of the macula	Dr Subhadra Jalali	Pfizer, USA	2006-2012
A multi-center, placebo-controlled, randomized, parallel group dose-ranging study to assess the efficacy and safety of LX201 for prevention of corneal allograft rejection episodes and graft failure following penetrating keratoplasty with LX201 implantation in subjects who are at increased immunological risk.	Dr Virender S Sangwan	LUX Biosciences, USA	2008-2010
A multi-center, placebo-controlled, randomized, parallel group dose-ranging study to assess the efficacy and safety of LX201 for prevention of corneal allograft rejection episodes and graft failure following penetrating keratoplasty with LX201 implantation in subjects who have experienced one or more rejection episodes following penetrating keratoplasty	Dr Virender S Sangwan	LUX Biosciences, USA	2008-2010
Protein Kinase C ß Inhibitor reduction in the occurrence of center-threatening diabetic macular edema. B7A-MC-MBDL	Dr Subhadra Jalali	Eli Lily, India	2005-2010
Posurdex study for DME	Dr Ajit Babu Majji	Allergan, USA	2006-2009
Posurdex study for RVO	Dr Annie Mathai	Allergan, USA	2006-2009
Posurdex study for intermediate uveitis	Dr Virender S Sangwan	Allergan, USA	2006-2009
LUMINATE uveitis study (LX211-01-UV)	Dr Somasheila Murthy Dr Soumyava Basu	LUX Biosciences, USA	2007-2009 (Hyderabad and Bhubaneswar campuses)
LUMINATE uveitis study (LX211-02-UV)	Dr Somasheila Murthy Dr Soumyava Basu	LUX Biosciences, USA	2007-2009 (Hyderabad and Bhubaneswar campuses)
LUMINATE uveitis study (LX211-03-UV)	Dr Somasheila Murthy Dr Soumyava Basu	LUX Biosciences, USA	2007-2009 (Hyderabad and Bhubaneswar campuses)
A phase 3 safety and efficacy study of vitreosolve for ophthalmic intravitreal injection for inducing posterior vitreous detachment in retinopathy subjects	Dr Ajit Babu Majji Dr Taraprasad Das	Vitreo Retinal Agencies, USA	2008-2010 (Hyderabad and Bhubaneswar campuses)
Comparison of postoperative refractive outcomes after calculation of IOL power using the IOL master and ultrasound biometry	Dr Sujata Das	Hyderabad Eye Research Foundation, India	2009 onwards
A phase II prospective, randomised, multi-center, diabetic vascular edema dose ranging, comparator study evaluating the efficacy and safety of PF-04523655 versus laser therapy (DEGAS)	Dr Soumyava Basu	Pfizer, USA	2009 onwards
A 6-day, phase 3, multicenter, randomised, double-masked, parallel study to compare the safety and efficacy of Gatifloxacin 0.5% ophthalmic solution BD with that of vehicle in the treatment of acute bacterial conjunctivitis	Dr Prashant Garg	Allergan, USA	2008-2009
A study of unilateral retinoblastoma with and without histopathologic high-risk features and the role of adjuvant chemotherapy – a groupwide phase III study	Dr Santosh G Honavar	National Childhood Cancer Foundation, USA	2009-2011
A phase 3 prospective, randomized, double-masked, 12-week parallel group study evaluating the efficacy and safety of Latanoprost and Timolol in paediatric subjects with glaucoma	Dr Anil K Mandal	Pfizer, USA	2009 (3 months study)
Indian Council of Medical Research National Retinoblastoma Registry	Dr Santosh G Honavar Dr P M Fairooz	Indian Council of Medical Research, India	2009 onwards



## **Publications**

- Agarwal RV, Murthy S, Sangwan VS, Biswas J. Current approach in diagnosis and management of anterior uveitis. Ind J Ophthalmol 2010; 58: 11-9
- Balla MMS, Vemuganti GK, Kannabiran C, Honavar SG, Murthy R. Phenotypic characterization of retinoblastoma for the presence of putative cancer stem-like cell markers by flow cytometry. *Invest Ophthalmol Vis Sci* 2009; 50: 1506-14
- 3. **Basu S, Das T**, Biswas G. Bilateral toxoplasma retinochoroiditis in a patient with chronic myeloid leukemia treated with imatinib mesylate.

  Ocular Immunol Inflamm 2010; 18: 64-5
- Basu S. Hypertensive retinopathy. In Ready Reckoner in Ophthalmology ed by Ramamurthy D. AJR Medi Solutions, New Delhi, 2010; 407-8
- Bharadwaj SR, Candy TR. Accommodative and vergence responses to conflicting blur and disparity stimuli during development. J Vis 2009; 9: 1-18
- Bhatia K, Narayanan R. B scan ultrasonography to screen for retinal tears in acute symptomatic age-related posterior vitreous detachment. Ophthalmology 2009; 116: 2262-3
- 7. **Chakrabarti S**. Genetic variants of glaucoma. *International Glaucoma Review* 2009; 10: 114-5
- 8. Chakrabarti S. Novel myocilin mutations.
  International Glaucoma Review 2009: 10: 171
- 9. **Chakrabarti S**. WDR36 gene mutations. *International Glaucoma Review* 2009; 11: 2
- Chakrabarti S. Clinical forms of glaucoma: LOXLI polymorphism and pseudoexfoliation in Chinese. International Glaucoma Review 2009; 11: 3
- Chalasani ML, Swarup G, Balasubramanian D.
   Optineurin and its mutants: molecules associated with some forms of glaucoma.
   Ophthalmic Research 2009; 42: 176-84
- Chaurasia S, Muralidhar R, Garg P, Gopinathan
   U. Donor corneal button related endophthalmitis after keratoplasty. Clin Exp Ophthalmol 2010; 38: 75-6
- 13. Cowden JW, Garg P, Filipec M. A patient presents with corneal ulcer. What work up and treatment would you recommend? In Curbside consultation in cornea and external disease: 49 clinical questions ed by Price F W; Thorofare, NJ, Slack, 2010
- Das S, Honavar SG, Dhepe N, Naik MN. Maternal skin allograft for cicatricial ectropion in congenital icthyosis.
   Ophthal Plast Reconst Surg 2010; 26: 42-3

- Das T, Pathengay A, Hussain N, Biswas J. Eales' disease: Diagnosis and management.
   Eye 2010; 24: 472-82
- 16. Das T, Deshmukh HS, Mathai A, Reddy AK. Stenotrophomonas maltophilia endogenous endophthalmitis: clinical presentation, sensitivity spectrum and management.
  J Med Microbiol 2009; 58: 837-8
- Das T, Padhi T, Sharma S. Endophthalmitis management in India a decade and after the endophthalmitis vitrectomy study. e Ophthalmology 2010
- Das T. Gene therapy in ocular disorders. In Ready Reckoner in Ophthalmology ed by Ramamurthy D. AJR Medi Solutions, New Delhi, 2010; 443-5
- 19. D'Britto V, Tiwari S, Purohit V, Wadgaonkar PP, Bhoraskar SV, Bhonde RR, Prasad BLV. Composites of plasma treated poly (etherimide) films with gold nanoparticles and lysine through layer by layer assembly: a "friendly rough" surface for cell adhesion and proliferation for tissue engineering applications. J Materials Chem 2009; 19: 544-50
- Garg P, Chaurasia S, Vaddavalli PK, Muralidhar R, Mittal V, Gopinathan U. Microbial keratitis after LASIK. J Refract Surg 2009; 26: 209-16
- Garg P. Pathogenesis of pterygium: role of Eph receptors and ligand ephrins.
   Can J Ophthalmol 2009; 44: 138-40
- 22. **Garg P**. Investigative modalities in infectious keratitis. *Ind J Ophthalmol* 2009; 57: 159
- Garudadri CS. Pseudo-gonio synechia: an artifact on two-mirror gonioscopy. Ind J Ophthalmol 2010; 58: 59-60
- Gokhale NS, Vemuganti GK. Diclofenac-induced acute corneal melt after collagen crosslinking for keratoconus. Cornea 2010; 29: 117-9
- 25. Gopinathan U, Sharma S, Garg P, Rao GN. Review of epidemiological features, microbiological diagnosis and treatment outcome of microbial keratitis: experience of over a decade. *Ind J Ophthalmol* 2009; 57: 273-9
- 26. **Gothwal VK**, Wright TA, Lamoureux EL, Pesudovs K. Using Rasch analysis to revisit the validity of the cataract TyPE spec instrument for measuring cataract surgery outcomes.

  J Cataract Refract Surg 2009; 35: 1509-17
- Gothwal VK, Wright TA, Lamoureux EL, Pesudovs K. Visual activities questionnaire: assessment of subscale validity for cataract surgery outcomes.
   J Cataract Refract Surg 2009; 35: 1961-9

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- Gothwal VK, Pesudovs K, Wright T, McMonnies CW. McMonnies questionnaire: enhancing screening for dry eye syndrome using Rasch analysis.
   Invest Ophthal Vis Sci 2010; 51: 1401-7
- Gothwal VK, Pesudovs K. Interactive, computerbased, self-reported, visual function questionnaire: the PalmPilot-VFQ. Eye 2009; 23: 1572-81
- Gothwal VK, Wright TA, Lamoureux EL, Lundström M, Pesudovs K. Catquest questionnaire: re-validation in an Australian cataract population. Clin Exp Ophthalmol 2009; 37: 785-94
- Gothwal VK, Wright TA, Lamoureux EL, Pesudovs K. Activities of daily vision scale: what do the subscales measure? Invest Ophthalmol Vis Sci 2010; 51: 694-700
- Gothwal VK, Wright TA, Lamoureux EL, Pesudovs K. Cataract symptom scale: clarifying measurement. Br J Ophthalmol 2009; 93: 1652-6
- Gothwal VK, Wright TA, Lamoureux EL, Pesudovs K. Cataract symptom score: Rasch re-validation. Ophthalmic Epidemiol 2009; 16: 296-303
- Gothwal VK, Wright TA, Lamoureux EL, Pesudovs K. Guttman scale analysis of the distance vision scale. *Invest Ophthalmol Vis Sci* 2009; 50: 4496-501
- Gothwal VK, Wright TA, Lamoureux EL, Pesudovs K. Rasch analysis of the quality of life and vision function questionnaire.
   Optom Vis Sci 2009; 86: E836-E844
- Gothwal VK, Wright TA, Lamoureux EL, Pesudovs K. Rasch analysis of the visual function and quality of life questionnaires. Optom Vis Sci 2009; 86: 1160-8
- 37. **Gothwal VK**, Wright TA, Lamoureux EL, Pesudovs K. Validity of the adaptation to age-related vision loss scale in an Australian cataract population. *J Optom* 2009; 2: 142-7
- Gupta R, Vemuganti GK, Reddy VA, Honavar SG. Histopathologic risk factors in retinoblastoma in India. Arch Pathol Lab Med 2009; 133: 1210-4
- Haseeb A, Iliyas M, Chakrabarti S, Farooqui AA, Naik SR, Ghosh S, Suragani M, Ehtesham NZ. Single nucleotide polymorphisms in peroxisome proliferator-activated receptor and their association with plasma levels of resistin and metabolic syndrome in a South Indian population.
   J Biosci 2009; 34: 405-14
- 40. **Honavar SG**. Emerging options in the management of advanced intraocular retinoblastoma. *Br J Ophthalmol* 2009; 93: 848-9
- Iyer G, Pillai VS, Srinivasan B, Guruswami S, Padmanabhan P. Mucous membrane grafting for lid margin keratinization in Stevens-Johnson syndrome: results. Cornea 2010; 29: 146-51

- 42. **Jalali S, Rani PK, Chhablani J**. Management of paediatric retinal detachments. In *Surgical techniques* in ophthalmology retina and vitreous surgery ed by Garg A and Alio JL; New Delhi, Jaypee-Highlights, 2010
- 43. **Jalali S**, Holder GE, Vedantham V. Understanding clinical visual electrophysiology. In *Ready Reckoner in Ophthalmology* ed by Ramamurthy D. AJR Medi Solutions, New Delhi, 2010; 396-400
- 44. **Kannabiran C**. Genetics of corneal endothelial dystrophies. *J Genet* 2009; 88: 487-94
- 45. **Katta S, Chakrabarti S, Kaur I**. The molecular genetic basis of age-related macular degeneration: an overview. *J Genet* 2009; 88: 425-49
- 46. Katta S, Chakrabarti S, Kaur I, Hussain N. Genetics of age related macular degeneration. In Textbook of Vitreoretinal Diseases and Surgery ed by Natarajan S and Hussain N. New Delhi, Jain Book Depot, 2009
- Katz J, Tielsch JM, Thulasiraj RD, Coles C, Sheeladevi S, Yanik EL, Rahmathullah L. Risk factors for maternal night blindness in rural South India. Ophthalmic Epidemiology 2009; 16: 193-7
- 48. Kaur I, Katta S, Reddy RK, Narayanan R, Mathai A, Majji AB, Chakrabarti S. The involvement of complement factor B and complement component C2 in an Indian cohort with age-related macular degeneration.

  Invest Ophthalmol Vis Sci 2009; 51: 59-63
- 49. **Kekunnaya R**, Chippalamadugu R, **Sachdeva V**, Rao BV, **Pathengay A**. Association of hyperhomocysteinemia with non-arteritic ischemic optic neuropathy and cilioretinal artery obstruction. *Asian J Ophthalmol* 2009; 11: 32-4
- Kesarwani S, Murthy R, Vemuganti GK. Surgical technique of removing congenital fibro vascular pupillary membrane and clinico-pathologic correlation. J AAPOS 2009; 13: 618-20
- 51. **Koppula PR**, Chelluri LK, **Polisetti N**, **Vemuganti GK**. Histocompatibility testing of cultivated human bone marrow stromal cells a promising step towards pre-clinical screening for allogeneic stem cell therapy. *Cell Immunol* 2009; 259: 61-5
- 52. **Koppula PR, Polisetti N, Vemuganti GK**. Unstimulated diagnostic marrow tap a minimally invasive and reliable source for mesenchymal stem cells. *Cell Biol Int* 2010; 34: 275-81
- 53. **Krishnaiah S, Das TP, Kovai V, Rao GN**. Associated factors for age-related maculopathy in the adult population in southern India: the Andhra Pradesh Eye Disease Study.

  Br J Ophthalmology 2009; 93: 1146-50
- Mandal AK. Shallow AC. In Glaucoma, vol 2: Surgical management ed by Shaarawy T et al; Oxford, Saunders Elsevier, 2009



- Mandal AK. Comment on Glaucoma medication in pediatric population. International Glaucoma Review 2009; 11: 76
- 56. Manderwad GP, Bhaduri A, Kannabiran C, Honavar SG, Vemuganti GK. Lack of association of high risk human papilloma virus in ocular surface squamous neoplasia in India. Archives of Pathol Lab Med 2009; 133: 1246-50
- Marmamula S, Keeffe JE, Rao GN. Uncorrected refractive errors, presbyopia and spectacle coverage: results from a rapid assessment of refractive error survey. Ophthalmic Epidemiol 2009; 16: 269-74
- Meghpara B, Nakamura H, Vemuganti GK, Murthy SI, Sugar J, Yue BY, Edward DP. Histopathologic and immunohistochemical studies of keratoglobus. Arch Ophthalmol 2009; 127: 1029-35
- Murthy R, Kesarwani S. Botulinum toxin in the management of acquired motor fusion deficiency. *Indian J Ophthalmol* 2009; 57: 463-4
- Murthy R, Honavar SG, Naik MN, Menon V, Bhaduri A, Das S. Centurion syndrome: clinical presentation and surgical outcome. Orbit 2009; 28: 269-74
- 61. **Murthy R, Naik MN**, Desai S, **Honavar SG**. PHACE syndrome associated with congenital oculomotor nerve palsy. *Strabismus* 2009; 17: 75-7
- Murthy R, Giridhar P, Khanna RC, Rao GV.
   Developing paediatric eye care teams in India.
   Ind J Ophthalmol 2009; 58: 172-3
- Narayanan Rand Kuppermann BD. Corticosteroids, triamcinolone, fluocinolone, dexamethasone and others. In Retinal pharmacotherapy ed by Nguyen QD et al; Oxford, Saunders Elsevier, 2010
- Narayanan R, Kuppermann BD. Hayluronidase for pharmacologic vitreolysis. Dev Ophthalmol 2009; 44: 20-5
- Narula R, Tibra NK, Narayanan R. Safety enhanced PDT for chronic central serous retinopathy: comment. Retina 2009; 29: 867
- 66. Parsam VL, Kannabiran C, Honavar S, Vemuganti GK, Javed Ali M. A comprehensive, sensitive and economical approach for the detection of mutations in the RBI gene in retinoblastoma.

  J Genet 2009; 88: 517-27
- Pehere NK, Chandrasekhar G, Kekunnaya R.
   The critical period for surgical treatment of dense congenital bilateral cataracts. J AAPOS 2009; 13: 527-8
- 68. **Pehere NK, Murthy R**. Intraocular lenses in children. *Ophthalmology* 2009; 116: 1832-3
- 69. Raman R, **Rani PK**, Reddi Rachepalle S, Gnanamoorthy P, Uthra S, Kumaramanickavel G, Sharma T. Prevalence of diabetic retinopathy in

- India: Sankara Nethralaya Diabetic Retinopathy Epidemiology and Molecular Genetics Study report 2. Ophthalmology 2009; 116: 311-8
- Raman R, Rani PK, Kulothungan V, Sharma T. Diagonal ear lobe crease in diabetic south Indian population: is it associated with diabetic retinopathy? Sankara Nethralaya Diabetic Retinopathy Epidemiology and Molecular Genetics Study (SN-DREAMS, Report no 3) BMC Ophthalmol 2009; 9:11
- Rani PK, Raman R, Chandrakantan A, Pal SS, Perumal GM, Sharma T. Risk factors for diabetic retinopathy in self-reported rural population with diabetes. J Postgrad Med 2009; 55: 92-6
- Rani PK, Jalali S. Must screening examinations for retinopathy of prematurity necessarily be painful. Retina 2010; 30: 381-2
- Rao HBL, Sekhar GC, Babu JG, Parikh RS. Clinical measurement and categorization of optic disc in glaucoma patients. Ind J Ophthalmol 2009; 57: 361-4
- 74. Rao HBL, Babu JG, Sekhar GC. Comparison of the diagnostic capability of the Heidelberg retina tomographs 2 and 3 for glaucoma in the Indian population. Ophthalmology 2010; 117: 275-81
- Rao HBL, Sekhar GC. Relative efficacy of Prostaglandins. Ophthalmology 2009; 116: 1418
- Rao KN, Kaur I, Chakrabarti S. Lack of association of three primary open angle glaucoma susceptible loci with primary glaucomas in an Indian population. Proc Natl Acad Sci, USA 2009; 106: E125-6
- Rath S, Honavar SG, Naik M, Anand R, Agarwal B, Krishnaiah S, Sekhar GC. Orbital cysticercosis: clinical manifestations, diagnosis, management, and outcome. Ophthalmology 2010; 117: 600-5
- Rath S, Honavar SG, Naik MN, Gupta R, Reddy VA, Vemuganti GK. Evisceration in unsuspected intraocular tumors. Arch Ophthalmol 2010; 128: 372-9
- Rath S, Honavar SG, Reddy VA, Naik MN, Vemuganti GK, Murthy R. Sebaceous carcinoma of the eyelid metastasizing to the lacrimal sac after 5 years. Orbit 2009; 28: 309-12
- 80. **Rath S**, Kar S, **Sahu SK**, **Sharma S**. Fungal periorbital necrotizing fasciitis in an immunocompetent adult. *Ophthal Plast Reconst Surg* 2009; 25: 334-5
- 81. **Rath S, Vemuganti GK**, Biswas G, Mod H. Optic nerve and chiasmal germinoma.

  Ophthal Plast Reconst Surg 2009; 25: 161-3
- Ray D, Mandal AK, Chandrasekhar G, Naik M, Dhepe N. Port-wine vascular malformations and glaucoma risk in Sturge-Weber syndrome.

  J AAPOS 2010; 14: 105

- 83. Reddy AK, Garg P, Alam R, Gopinathan U, Sharma S, Krishnaiah S. Comparison of In vitro susceptibilities of gram positive cocci isolated from ocular infections against second and fourth generation quinolones at a tertiary eye care center in south India. Eye 2010; 24: 170-4
- 84. **Reddy AK, Garg P**, Shah V, **Gopinathan U**. Clinical, microbiological profile and treatment outcome of ocular infections caused by Achromobacter xylosoxidans. *Cornea* 2009; 28: 1100-3
- 85. Reddy AK, Garg P, Babu KH, Gopinathan U, Sharma S. In vitro antibiotic susceptibility of rapidly growing nontuberculous mycobacteria isolated from patients with microbial keratitis. Curr Eye Res 2010; 35: 225-9
- Rishi P, Maskati QB, Ray R, Iyer GK, Srinivasan B, Pillai VS. Vitreoretinal surgery in eyes with Pintucci biointegrable keratoprosthesis. Retina 2010; 30: 287-93
- Roy A, Sahu SK, Kesarwani S. IOL outcomes. Ophthalmology 2009; 116: 2483-4
- 88. **Sahu SK, Das S, Sachdeva V, Sangwan VS.**Alcaligenes xylosoxidans keratitis after autologous cultivated limbal epithelium transplantation.

  Can J Ophthalmol 2009; 44: 336-7
- 89. **Sahu SK, Das S, Rath S**. Blumenthal technique and its modification: the glory of anterior chamber maintainer, *Ind J Ophthalmol* 2010; 58: 86
- 90. **Sambhav K, Mathai A, Bhatia K**. Fungal endophthalmitis: fourteen years' experience from a center in India. *Retina* 2009; 29: 1548
- 91. **Sangwan VS**. Treatment of uveitis: beyond steroids. *Ind J Ophthalmol* 2010; 58: 1-2
- Sangwan VS. Peripheral ulcerative keratitis in RA: Practical pearls in management. In Curbside consultation in cornea and external disease: 49 clinical questions ed by Price F W; 2010, Slack
- Seitz B, Das S, Sauer R, Mena D, Hofmann-Rummelt C. Amniotic membrane transplantation for persistent corneal epithelial defects in eyes after penetrating keratoplasty. Eye 2009; 23: 840-8
- 94. Shome D, Poddar N, Sharma V, Sheorey U, Maru GB, Ingle A, Sarin R, Banavali S, Dikshit R, Jain V, Honavar S, Bellare J. Does a nanomolecule of carboplatin injected periocularly help in attaining higher intravitreal concentrations?
  Invest Ophthalmol Vis Sci 2009; 50: 5896-900
- Singh HP, Jalali S, Narayanan R, Kannabiran C. Genetic analysis of Indian families with autosomal recessive RP by homozygosity screening. *Invest Ophthalmol Vis Sci* 2009. 50: 4065-71
- Sinha A, Narula R, Narayanan R. 23-gauge versus 20-gauge system for pars plana vitrectomy. Br J Ophthalmol 2009; 93: 1694-5

- 97. Sourav S, Patricia A, **Sharma S**, Kanungo R, Jayachandran S, Prashanth K. Detection of pneumolysin and autolysin genes among antibiotic resistant Streptococcus pneumoniae in invasive infections. *Indian J Med Microbiol* 2010; 28: 34-9
- Subramaniam SV. Binocular interaction in post-LASIK subjects with unsatisfactory outcome. Curr Eye Res 2009; 34: 1030-5
- Taneja M, Garg P, Gopinathan U: Setting up an Eye Bank: Corneal Transplantation ed by Dr R B Vajpayee et al; JayPee Brothers Medical Publishers (P) Ltd, 2010
- 100. Tibra NK, Jalali S, Reddy AK, Narayanan R, Agarwal R. Traumatic endophthalmitis caused by staphylococcus gallinarum. J Med Microbiol 2010; 59: 365-6
- 101. Tielsch JM, Katz J, Thulasiraj RD, Coles C, Sheeladevi S, Yanik EL, Rahmathullah L. Exposure to indoor biomass fuel and tobacco smoke and risk of adverse reproductive outcomes and mortality, respiratory morbidity and growth among newborn infants in South India. Int J Epidemiol 2009; 38: 1351-63
- 102. Trehan HS, Sheth SS, Mathai A, Reddy RK, Moorthy RS. Diagnostic and therapeutic challenges. Retina 2010; 30: 180-3
- 103. Vyas S, Rathi V. Combined phototherapeutic keratectomy and amniotic membrane grafts for symptomatic bullous keratopathy. Cornea 2009; 28: 1028-31
- 104. Vemuganti GK, Fatima A, Madhira LS, Sangwan VS, Basti S. Limbal stem cells: application in ocular biomedicine. *Int Rev Cell Mol Bio* 2009; 275: 133-81
- 105. Vemuganti GK, Honavar SG. Eyelid stromal tumors. In Essentials of Ophthalmic Oncology ed by Singh AD et al; Thorofare, NJ, Slack, 2009
- 106. Verma A, Rani PK, Raman R, Pal SS, Laxmi G, Gupta M, Sahu C, Vaitheeswaran K, Sharma T. Is neuronal dysfunction an early sign of diabetic retinopathy? Microperimetry and spectral domain optical coherence tomography (SD-OCT) study in individuals with diabetes, but no diabetic retinopathy. Eye 2009; 23: 1824-30
- 107. Uthra S, Raman R, Mukesh BN, Rajkumar SA, Kumari PR, Lakshmipathy P, Gnanamoorthy P, Sharma T, McCarty CA, Kumaramanickavel G. Protein kinase C beta (PRKCBI) and pigment epithelium derived factor (PEDF) gene polymorphisms and diabetic retinopathy in a south Indian cohort. Ophthalmic Genet 2010; 31: 18-23
- 108. Yorston D, Garg P. Corneal grafting: what eye care workers need to know? Community Eye Health 2009; 22: 44-5



## **Presentations**

In addition to the following, our faculty participated in other international/national scientific and non-scientific forums during the year. Faculty members also presented at LVPEI meetings and CME programs. At several meetings multiple presentations were made.

#### **D** Balasubramanian

#### International

#### **Invited speaker**

University of Nebraska, Omaha, NE, USA. April 26-27, 2009 University of Virginia, Charlottesville, VA, USA. April 29, 2009 National Eye Institute, Bethesda, MD, USA. April 30 – May 2, 2009

#### **Participant**

Association for Research in Vision and Ophthalmology annual meeting, Fort Lauderdale, Florida, USA. May 3-7, 2009

#### **Invited speaker**

Meeting of International Human Rights Network of Academies and Scholarly Societies, Rabat, Morocco. May 20-24, 2009

Inauguration ceremony, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia. September 22-23, 2009

#### Member

Leopoldina Biennial Assembly, Halle, Germany. October 2-4, 2009

#### **Secretary General**

11th general conference of Third World Academy of Sciences, Durban, South Africa. October 17-26, 2009

#### Invited speaker

Grant proposal meeting, Wellcome Trust, London, UK. November 17-19, 2009

Conference of Presidents of Academies & Scholarly Societies, Israel Academy of Scholars & Humanities, Jerusalem, Israel. March 14-17, 2010

#### Secretary General

Third World Academy of Sciences Officers meeting, Paris, France. March 18-19, 2010

 $6^{th}$  Meeting of Scientific Board of the International Basic Sciences Programme, Paris, France. March 28 – April 1, 2010

#### **National**

#### Invited speaker

Thadikonda symposium, Andhra University, Visakhapatnam. April 14, 2009

#### Chair

XXII meeting of Life Sciences Research Board, Defence Research Development Organization, New Delhi. April 15, 2009

Stem Cell Task Force meeting, Department of Biotechnology, Government of India. New Delhi. June 8-9, 2009

Research Committee meeting, National Chemical Laboratory, Pune. June 19, 2009

Merit and Normal Assessment Scheme (MANAS) meeting, Council of Scientific & Industrial Research, New Delhi. June 25, 2009

#### **Invited speaker**

Department of Science & Technology "Inspire" program, National Institute of Technology, Warangal. June 26, 2009

Platinum jubilee function, Indian Science News Association, Kolkata. July 9, 2009

#### **President**

Academy/Springer Signing ceremony, Indian Academy of Sciences, Bangalore. July 13, 2009

#### Invited speaker

Frontiers in Photobiology symposium, Bhabha Atomic Research Centre, Mumbai. August 25, 2009

Launch of 'Challenge Lecture' series, Indian Institute of Technology, Hyderabad. September 29, 2009

Vigyan Jyoti Shivir, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore & Kishore Vaigyanik Protsahan Yojana, New Delhi. October 12-14, 2009

Annual Convention of Society of Biotechnologists, Vellore Institute of Technology, Vellore. November 27, 2009

Bhabha Centenary Symposium, Tata Institute of Fundamental Research, Mumbai. December 3-5, 2009

BioAsia International Conference, All India Biotech Association, Hyderabad. January 3-4, 2010

#### **Foundation Day Lecture**

Institute of Microbial Technology, Chandigarh. January 24, 2010

#### Chair

SAC Centre for Stem Cell Research, Christian Medical College, Vellore. February 17, 2010

#### Invited speaker

Social Responsibility Conclave, Indian School of Business, Hyderabad. March 6, 2010

#### Soumyava Basu

#### International

#### **Invited speaker**

University-Eye Clinic Charité, CVK Humboldt University Berlin. March 1, 2010

Topic: Infectious uveitis – experience from a tertiary care center in eastern India

#### National

#### Free paper

CME, Orissa State Ophthalmological Society, Cuttack.

April 12, 2009

Topic: Idiopathic macular telengiectasia

#### Organising secretary

Uveitis and Ocular Inflammation Update, LVPEI, Bhubaneswar. July 4, 2009

#### **Invited faculty**

Orissa State Society Meeting, Bhubaneswar.

November 14-15, 2009

Topics: 23-gauge vitrectomy

Management of posterior segment complications of anterior segment surgery

#### Free paper

Annual meeting of Uveitis Society of India, Chennai.

December 4-6, 2009

Topic: Practice patterns of ocular toxoplasmosis in India: a physician survey-based study

#### **Sunita Chaurasia**

#### **National**

#### **Invited speaker**

Hyderabad Ophthalmic Association meeting, Hyderabad. June 28, 2009

Topic: Infective keratitis

#### Subhabrata Chakrabarti

#### International

#### **Invited speaker**

3<sup>rd</sup> World Glaucoma Congress, Boston, USA. July 8-11, 2009 Topics: Genetics of glaucoma

CYPIBI haplotypes in POAG and PACG Genetics of primary congenital glaucoma

Vision Institute, Federal University of Sao Paolo, Brazil; Dept of Ophthalmology, Campinas State University, Sao Paolo; Medical Institute of Santa Casa, Sao Paolo and University of Sao Paolo, Brazil. July 13-16, 2009

Topics: Ocular research in India: Perspectives from a tertiary referral eye care centre in India

Genetics of primary congenital glaucoma

11th General Conference of TWAS (Academy of Sciences for the Developing World), Durban, South Africa.

October 20-23, 2009

Topic: Genomic dissection of primary congenital glaucoma: A blinding disorder in children in the developing world

 $I^{\text{st}}$  Annual Meeting of IBILI, University of Coimbra, Portugal. December 11-13, 2009

Topic: Involvement of the inflammatory and ECM regulators in POAG pathogenesis

#### **National**

#### Invited speaker

Mahatma Gandhi National Institute of Research and Social Action (MGNIRSA), Institute of Genetics, Hyderabad. January 23, 2010

Topic: Molecular dissection of glaucoma

International conference on 'Recent Advances in Ophthalmic Genetics and Gene Therapy', Narayana Nethralaya, Bangalore. February 3-4, 2010

Conclave of Afro-Asia Young Scientists on Energy Climate and Development, TWAS-ROCASA, Bangalore.

February 11-13, 2010

Golden Jubilee of the Indian Anthropological Society, Kolkata. March 12, 2010

Topic: From classical genetics to molecular medicine: Understanding disease pathogenesis for better health care

#### Sujata Das

#### **National**

#### Free paper

CME, Orissa State Ophthalmological Society, Cuttack. April 12, 2009

Topic: Successful management of a case of fungal keratitis with lens rupture

#### **Invited speaker**

68<sup>th</sup> Annual meeting of All India Ophthalmological Society, Kolkata, January 21-24, 2010

Topic: Ocular surface lubricants - over or under used

Free paper: Clinical and microbiological profile of microsporidial ratoconjunctivitis in a tertiary eye care centre

**Poster:**Clinical and microbiological profile of polymicrobial keratitis

Video: Management of tunnel infection by sclerocorneal patch

#### **Taraprasad Das**

#### International

### Poster presentation

Association for Research in Vision and Ophthalmology annual meeting, Fort Lauderdale, Florida, USA. May 3-7, 2009

Topic: Trends and indications of anti VEGF therapy in a tertiary eye care center in eastern India

#### Invited speaker

Asia Pacific Academy of Ophthalmology (APAO) and American Academy of Ophthalmology (AAO) joint meeting, Bali, Indonesia. May 16-19, 2009

Topics: Management of failed scleral buckle

Intravitreal steroid in endophthalmitis

Laser photocoagulation in diabetic macular edema

Cambridge Symposium, Cambridge, UK. September 3-4, 2009 Topic: Eales' disease: Clinical features & management

#### **Invited faculty**

American Academy of Ophthalmology annual meeting, San Francisco, USA. October 24-27, 2009

Topic: Cluster endophthalmitis

International Forum of Vitreo Retinal Diseases, Haikou, China. December 4-6, 2009

Topic: Trends and indications for intravitreal anti VEGF therapy in tertiary eye center in India

#### **National**

#### **Invited speaker**

Orissa Endocrine Society meeting, Bhubaneswar. April 11, 2009 Topic: Role of ophthalmologist in management of diabetic retinopathy

#### Free paper

 ${\sf CME,\,Orissa\,\,State\,\,Ophthalmological\,\,Society,\,\,Cuttack.}$ 

April 12, 2009

Topic: Pegaptinib sodium in recalcitrant diabetic macular edema

#### **Invited faculty**

Retina 2009, Aravinda Eye Hospital, Vijayawada. August 30, 2009

Topics: Diabetic macular edema – diagnosis and management Pascal retinal photocoagulation

Is systemic antibiotic necessary in endophthalmitis

#### **Invited speaker**

Eye bank fortnight, Government of Orissa, Bhubaneswar. September 7, 2009

Topic: Role of ophthalmologist in eye banking

Foundation Day, Pushpagiri Eye Institute, Hyderabad.

September 13, 2009

Topic: Vitreo retinal fellowship training

#### **Invited faculty**

Vaisakhi Eyecon 2009, 33<sup>rd</sup> annual meeting of Andhra Pradesh Ophthalmological Society, Visakhapatnam. October 1-4, 2009 Topics: Is empiric treatment for endophthalmitis changing? 23g Vitrectomy

#### Invited speaker

Orissa State Society meeting, Bhubaneswar.

November 14-15, 2009

Topic: Capacity building in diabetic retinopathy

B Rajguru Oration: No mission, no margin

International Diabetic Retinopathy and Vascular Retinopathy Symposium, Aravind Eye Hospital, Madurai. January 9-10, 2010 Topic: Eales' disease

First B Patnaik Memorial Symposium, National Institute of Ophthalmology, New Delhi. January 17, 2010

Topic: Eales' disease



#### Sanghamitra Dash

#### **National**

#### **Invited faculty**

Eastern Zone Glaucoma meeting, Glaucoma Society of India, Bhubaneswar. September 13, 2009

Topic: Medical management of glaucoma

#### **Merle Fernandes**

#### International

#### Co-faculty, instruction course

American Academy of Ophthalmology annual meeting, San Francisco, USA. October 24-27, 2009

#### **National**

#### Chief Instructor/Invited speaker

Vaisakhi Eyecon 2009, 33<sup>rd</sup> annual meeting of Andhra Pradesh Ophthalmological Society, Visakhapatnam. October 1-4, 2009 Topics: Pediatric cataract surgery

Allergic eye disease

Corneal tear repair: a stitch in time Post LASIK infectious keratitis

#### **Invited speaker**

68<sup>th</sup> Annual meeting of All India Ophthalmological Society, Kolkata. January 21-24, 2010

Topic: Eye registration with Mel 80

Cornea Update, Karnataka Ophthalmic Society Association

meeting, Bellary. February 14, 2010

Topics: Corneal diagrams

Surgical management of infectious keratitis Microbial keratitis due to rare organisms

#### Organising secretary

Target 20/20: Quest for Supernormal Vision, Cataract and Refractive Surgery Seminar, LVPEI, Visakhapatnam.

March 20-21, 2010

Topics: Manual small incision cataract surgery: To do or not to

do?

IOL insertion in SICS

Scleral vs corneal incision in phacoemulsification

Multifocal IOLs Surface ablation

#### **Prashant Garg**

#### International

#### Moderator/Invited speaker

Asia Pacific Academy of Ophthalmology (APAO) and American Academy of Ophthalmology (AAO) joint meeting, Bali, Indonesia. May 16-19, 2009

Topic: Blebitis and bleb related endophthalmitis

#### Invited speaker

SightLife Global Eye Bank and Corneal Transplant Congress, Seattle, Washington, USA. June 15-17, 2009

#### **Usha Gopinathan**

#### International

#### **Participant**

SightLife Global Eye Bank & Corneal Transplant Congress, Seattle, Washington, USA. June 15-17, 2009

48<sup>th</sup> meeting of Eye Bank Association of America, Seattle, Washington, USA. June 18-20, 2009

#### **Invited faculty**

Ist Council Meeting of Association of Eye Banks of Asia (AEBA), Tokyo International Forum, Tokyo, Japan. June 26, 2009

#### **National**

#### **Participant**

Seminar on 'Accreditation of Hospitals,' Confederation of Indian Industry (CII) in collaboration with QCI and NABH, New Delhi. July 4, 2009

#### Invited speaker

5<sup>th</sup> Annual General Body Meeting, VISION 2020: The Right to Sight – India, Patna. July 16-17, 2009

Inauguration of Bansara Eye Care Centre, Shillong, Meghalaya. August 10-11, 2009

ORBIS' DC-10 Flying Eye Hospital Program, Jaipur, Rajasthan. September 25, 2009

#### **Participant**

Accessible Healthcare – A Reality Check, Technopak Leadership Forum Healthcare, New Delhi. October 9, 2009

#### Invited speaker

Medical fraternity's support to HCRP, Symposium at SCB Medical College & Hospital, Cuttack, Orisssa. November 17, 2009

#### **Invited faculty**

National CME on Eye Banking, LAICO, Aravind Eye Care System, Madurai. December 19-20, 2009

#### **Participant**

68<sup>th</sup> Annual meeting of All India Ophthalmological Society, Kolkata. January 21-24, 2010

#### Santosh Honavar

#### International

#### Coordinator, Scientific Program/Chair, Session/Faculty

Asia Pacific Academy of Ophthalmology (APAO) and American Academy of Ophthalmology (AAO) joint meeting, Bali, Indonesia. May 16-19, 2009

#### **National**

#### **Invited faculty**

Oculoplasty Update, MGM Eye Hospital and Raipur Ophthalmic Association, Raipur. September 16, 2009

#### **Organizing Secretary/Faculty**

Eye-PEP (Postgraduate Education Program) 2009, LVPEI, Hyderabad. September 23-27, 2009

#### **Invited faculty**

Kalpavriskha, Postgraduate Program, Agarwal Eye Institute, Chennai, October I, 2009

Vaisakhi Eyecon 2009, 33<sup>rd</sup> annual meeting of Andhra Pradesh Ophthalmological Society, Visakhapatnam. October 1-4, 2009

Madhya Pradesh State Ophthalmological Society annual meeting, Bhopal, October 9-11, 2009

Karnataka State Ophthalmological Society annual meeting, Davanagere. November 27-29, 2009

Oculoplasty Association of India annual meeting, Ahmedabad. December 3-4, 2009

68<sup>th</sup> Annual meeting of All India Ophthalmological Society, Kolkata. January 21-24, 2010

#### Subhadra Jalali

#### International

#### Chair, session/Free paper

47<sup>th</sup> ISCEV Symposium, Padova-Abano-Terme, Italy. July 6-10, 2009

Topic: ERG in posterior microphthalmos with and without retinal dystrophy

#### Poster presentation

Topic: Enhanced S-Cone syndrome: Report of first three cases from India and response to topical Drozolamide

#### **Invited faculty**

National meeting of Vietnamese Society of Ophthalmology, Danang, Vietnam. September 9-12, 2009

Topics: Management of endophthalmitis

Management of severe posterior segment open globe Injuries

#### Invited speaker

World Congress of Pediatric Ophthalmology and Strabismus, Barcelona, Spain. September 12-13, 2009

Topics: Neonatal endophthalmitis: Case series of 13 eyes Safety and efficacy of scleral fixated intraocular lenses in children

#### **National**

#### **Invited speaker**

CME on ROP, Little Flower Hospital and Research Centre, Kerala Society of Ophthalmic Surgeons, Angamaly. October 4, 2009

Topics: Role of electrodiagnostics in pediatric retinal disorders Surgical management of ROP

# Invited speaker/Member, Scientific & Organisational Committees

Second World ROP Congress, International NO-ROP group, New Delhi, November 21-23, 2009

Topics: Training for personnel involved in ROP programmes Clinical outcomes and complications of Intravitreal Byeacizumab in active proliferative ROP

Influence of birth weight on incidence and severity of ROP amongst twins in the Twin Cities ROP data

Mutation spectrum of Norrie disease pseudoglioma

Mutation spectrum of Norrie disease pseudoglioma (NDP) gene in a large cohort of Indian ROP and FEVR patients

#### **Invited faculty**

 $47^{\text{th}}$  National conference of Indian Academy of Pediatrics, Hyderabad, January 7-10, 2010

Topic: Clinical aspects of early intervention in blindness prevention due to pediatric retinal diseases

#### Invited speaker

68th Annual meeting of All India Ophthalmological Society, Kolkata. January 21-24, 2010

Topics: Management of vitreous haemorrhage with retinal tears in primary sitting (Instruction course)

Vitreous procedures in suspected and proven endophthalmitis (National symposium)

Basics and examination techniques of echography (Instruction course)

#### **Invited faculty**

Eye Neuron: A Neuro Ophthalmology Update, Father Muller Medical College, Mangalore. March 7, 2010

Topics: Unexplained visual loss: what is next?

The evaluation of isolated unexplained optic atrophy Role of electrophysiology in optic nerve diseases

#### Chitra Kannabiran

#### National

#### **Invited faculty**

68<sup>th</sup> Annual meeting of All India Ophthalmological Society, Kolkata. January 21-24, 2010

#### **Invited speaker**

National Seminar on Development of Biomarkers, MGNIRSA, Institute of Genetics, Hyderabad. January 24, 2010

International conference on 'Recent Advances in Ophthalmic Genetics and Gene Therapy', Narayana Nethralaya, Bangalore. February 3-4, 2010

#### **Inderjeet Kaur**

#### International

#### Poster presentation

Association for Research in Vision and Ophthalmology annual meeting, Fort Lauderdale, Florida, USA. May 3-7, 2009

Topic: An extended haplotype within the CFH gene without Y402H is associated with AMD susceptibility in an Indian cohort

#### **National**

#### Invited speaker

Second World ROP Congress, International NO-ROP group, New Delhi, November 21-23, 2009

Topic: Mutation spectrum of the Norrie Disease Pseudogliama (NDP) gene in Indian ROP and FEVR patients

International conference on 'Recent Advances in Ophthalmic Genetics and Gene Therapy', Narayana Nethralaya, Bangalore. February 3-4, 2010

Topic: Understanding the molecular genetics of AMD in an Indian cohort

#### Ramesh Kekunnaya

#### International

#### Member, Organizing Committee/Chair, session

World Congress of Pediatric Ophthalmology and Strabismus, Barcelona, Spain. September 12-13, 2009

#### Invited speaker

Topic: Duane Retraction Syndrome

#### Free paper

Topic: Outcome of strabismus surgery under one year of age

#### **Invited faculty**

American Academy of Ophthalmology annual meeting, San Francisco, USA. October 24-27, 2009

#### Video presentation

Topic: Interpretation of MRI in ophthalmological practice

#### National

#### Faculty/Moderator/Invited speaker

Interactive video symposium on cataract surgery, Hyderabad Ophthalmic Association meeting, Hyderabad. June 28, 2009

#### Siddharth Kesarwani

#### **National**

#### **Invited speaker**

CME, Orissa State Ophthalmological Society, Cuttack. April 12, 2009

Topic: Congenital fibrovascular pupillary membrane: An interesting case

Seminar on Micro Nutritional Deficiency, Indian Institute of Youth and Development, Bhubaneswar. May 10, 2009

Topic: Vitamin A deficiency eye disease

Seminar on 'Recent advances & preferred practice patterns in ophthalmology', Minto Ophthalmic Hospital, Bangalore. August 29-30, 2009

Topic: Advances in pediatric cataract surgery

#### **Invited faculty**

Pediatric cataract workshop, IGH Hospital, Rourkela. September 12, 2009

Topic: Pediatric cataract technique: Lecture and practical demo



#### Convener, instruction course

Vaisakhi Eyecon 2009, 33<sup>rd</sup> annual meeting of Andhra Pradesh Ophthalmological Society, Visakhapatnam. October 1-4, 2009 Topic: Evidence based medicine: Evaluating therapy

Annual conference of Orissa State Ophthalmology Society, Bhubaneswar. November 14-15, 2009

Topic: Spectacle prescription

#### **Invited faculty**

Topics: Pediatric cataract surgery: new trends and techniques Ocular myasthenia in children

 $16^{\rm th}$  annual meeting of Strabismological Society of India, Hyderabad. December 19-20, 2009

Topic: Surgical management of DVD

 $68^{\text{th}}$  Annual meeting of All India Ophthalmological Society, Kolkata. January 21-24, 2010

Videos: Surgical removal of congenital fibrovascular pupillary membrane

Surgical technique for management of isolated coloboma of the lens

#### **Rohit Khanna**

#### International

#### **Invited faculty**

American Academy of Ophthalmology annual meeting, San Francisco, USA. October 24-27, 2009

Topic: Visual rehabilitation and visual outcome

Poster:Changing trends in blindness prevalence: 10 years impact of a rural model in India

#### Video presentations

Topics: Difficulties in phacoemulsification in difficult situations and possible management

Wonder of water: Hydrodynamics simpler than phacodynamics!

A first namaste to eye care

#### **National**

#### **Invited speaker**

68<sup>th</sup> Annual meeting of All India Ophthalmological Society, Kolkata. January 21-24, 2010

Topic: Eliminating childhood cataract blindness

#### Pravin V Krishna

#### International

#### Invited speaker

Association for Research in Vision and Ophthalmology Annual Meeting, Fort Lauderdale, Florida, USA. May 3-7, 2009

#### Co instructor

American Academy of Ophthalmology annual meeting, San Francisco, USA. October 24-27, 2009

#### National

#### Invited speaker

DSAEK update, Cornea Club, Mumbai. August 2, 2009

#### Convenor/Invited speaker

Vaisakhi Eyecon 2009, 33<sup>rd</sup> annual meeting of Andhra Pradesh Ophthalmological Society, Visakhapatnam. October 1-4, 2009

#### Invited speaker

Vidharba Ophthalmic Society meeting, Wardha. October 10-11, 2009

 $\label{lem:condition} Kerala\ Ophthalmic\ Society\ annual\ meeting,\ Kannur.$ 

November 25-26, 2009

# Invited speaker/Co-instructor/Free paper, poster & video presentations

68<sup>th</sup> Annual meeting of All India Ophthalmological Society, Kolkata. January 21-24, 2010

#### **Invited speaker**

Cornea Update, Karnataka Ophthalmic Society Association meeting, Bellary. February 14, 2010

#### **Invited faculty**

Refractive surgery update, Vidharba Ophthalmic Society, Nagpur. March 28, 2010

#### Meena Lakshmipathy

#### **National**

#### **Discussant**

68<sup>th</sup> Annual meeting of All India Ophthalmological Society, Kolkata. January 21-24, 2010

#### Ajit Babu Majji

#### **National**

#### **Invited speaker**

 $I^{st}$  Anniversary conference of Modern Retina Centre, Vijayawada. October 11, 2009

Topic: Role of anti-VEGF agents and combination therapy in the management of wet age-related macular degeneration

#### Invited speaker/Chair, session

Hyderabad Ophthalmic Association meeting, Hyderabad. November 8, 2009

Topics: AMD management for general ophthalmologists 23 G vitrectomy for macular hole Fungal endophthalmitis

#### Chair, session/Secretary/Invited speaker

Vitreo Retinal Society of India conference, Palampur. November 25, 2009

Topic: Current management of fungal endophthalmitis

#### Invited speaker

Nagpur Ophthalmic Society Conference, Nagpur. January 3, 2010 Topics: Vitrectomy in PDR – challenges and strategies

Macular hole surgery

Endophthalmitis – long story made short

International Diabetic Retinopathy and Vascular Retinopathy Symposium, Aravind Eye Hospital, Madurai. January 9-10, 2010 Topics: BRVO: Risk factors & investigations

23 G vitrectomy for PDR

#### Chief instructor/Judge, free paper session

 $68^{\text{th}}$  Annual meeting of All India Ophthalmological Society, Kolkata. January 21-24, 2010

#### **Invited speaker**

Silver Jubilee celebrations of UVSM Hospital, Bhimavaram. March 21, 2010

Topic: Interesting case presentations and panel discussion

#### Anil K Mandal

#### International

### Chair, IC/Invited faculty/Poster presentation

World Glaucoma Congress, World Glaucoma Association, Boston, MA, USA. July 8-11, 2009

Topics: Congenital glaucoma and Infantile glaucoma Pediatric glaucoma surgery

#### **Participant**

Indo-Brazil Joint Research project "Genetic and Phenotypic Comparison of Primary Congenital Glaucoma in India and Brazil", São Paulo, Brazil. July 13-17, 2009

#### **National**

#### Chief Instructor/Invited speaker

 $68^{th}$  Annual meeting of All India Ophthalmological Society, Kolkata. January 21-24, 2010

Topic: Glaucoma in microspherophakia

#### Indumathi Mariappan

#### International

#### Poster presentation

Stem Cell Meeting, Cold Spring Harbor Laboratory, New York, USA. September 22-26, 2009

Topic: Fate of transplanted oral mucosal epithelial cells on the ocular surface of a patient with bilateral severe limbal stem cell deficiency

#### **Annie Mathai**

#### International

#### **Participant**

Allergan Posurdex Investigators' Summit, Singapore. July 25, 2009

#### **National**

#### **Invited faculty**

Annual CME programme, Sarojini Devi Eye Hospital, Hyderabad. July 31, 2009

#### **Invited speaker**

Dr Ramchander's clinical challenges session, Vaisakhi Eyecon 2009, 33<sup>rd</sup> annual meeting of Andhra Pradesh Ophthalmological Society, Visakhapatnam. October 1-4, 2009

Hyderabad Ophthalmic Association meeting, Hyderabad. November 14, 2009

Retina CME, Christian Medical College, Vellore. January 30, 2010

Hyderabad Ophthalmic Association meeting, Hyderabad. February 28, 2010

#### R Muralidhar

#### **National**

#### **Invited speaker**

Panel discussion on "The current concepts in the management of dry eye", Allergan, New Delhi. June 26, 2009

Topic: Intra operative complications during cataract surgery

Hyderabad Ophthalmic Association meeting, Hyderabad. June 28, 2009

Cornea Update, Karnataka Ophthalmic Society Association meeting, Bellary. February 14, 2010

Topics: Herpetic eye diseases

Ocular surface staining procedures in surface disorders

#### Somasheila Murthy

#### National

#### Invited speaker/Faculty

Hyderabad Ophthalmic Association meeting, Hyderabad. June 28, 2009

Topic: Cataract surgery in uveitis

Postgraduate CME program, Sarojini Devi Hospital, Hyderabad, September I, 2009

#### Free paper

Vaisakhi Eyecon 2009, 33<sup>rd</sup> annual meeting of Andhra Pradesh Ophthalmological Society, Visakhapatnam. October 1-4, 2009 Convenor, Instruction courses on uveitis, allergic eye diseases

#### Co-instructor, Allergic eye disease management

Karnataka State Ophthalmology meeting, Davangere. November 28, 2009

#### Session moderator/Judge, poster session

 $10^{th}$  Annual meeting of Uveitis Society of India, Chennai. December 4-6, 2009

Topic: Management tips in scleritis

#### Invited speaker

Annual meeting of Indian Association of Ophthalmic Pathologists, Chennai. December 7, 2009 Topic: Interesting cases

#### Panelist/Invited speaker

Hyderabad Ophthalmic Association meeting, Hyderabad. February 28, 2010

Topics: Allergy

NSAIDs in cataract surgery Scleritis: management tips

#### Suma Nalamada

#### **National**

#### Invited speaker

XXXIII National Congress of Indian Association of Medical Microbiologists, Mysore, India. November 6-8, 2009

Free paper: Clinicomicrobiological profile of ocular infections caused by Candida species

#### Raja Narayanan

#### International

#### Poster presentation

Association for Research in Vision and Ophthalmology annual meeting, Fort Lauderdale, Florida, USA. May 3-7, 2009

Topic: An extended haplotype within the CFH gene without Y402H is associated with AMD susceptibility in an Indian cohort

Asia Pacific Vitreo-Retina Society meeting, Taiwan.

November 12, 2009

Topic: Faster visual recovery after 23 gauge vitrectomy compared to 20 gauge vitrectomy

#### **National**

#### Invited speaker

4<sup>th</sup> Indian AMD Congress, Novartis, Amby Valley, Maharashtra. April 19, 2009

Topic: Diagnostic challenges in IPCV

Workshop on Cataract Management Protocols, supported by Sightsavers and District Blindness Control Society, LVPEI, Hyderabad. April 27-28, 2009

Topic: Concepts of quality and management in patient care

Symposium on AMD, Tamil Nadu Ophthalmology Association, Coimbatore, August 9, 2009

Topic: Role of anti VEGF beyond AMD

ARMD (SCENE) meeting, Pfizer, Chennai. September 5, 2009 Topic: Macugen in CRVO

#### **Chief Instructor**

Vaisakhi Eyecon 2009, 33<sup>rd</sup> annual meeting of Andhra Pradesh Ophthalmological Society, Visakhapatnam. October 1-4, 2009 Topic: Evidence based medicine: Evaluating therapy



#### Invited speaker/Moderator, session

Hyderabad Ophthalmic Association meeting, Hyderabad. November 8, 2009

Topics: PDT in IPCV

Sutureless vitrectomy

#### **Invited speaker**

Vitreo-Retina Society of India annual meeting, Palampur. November 26, 2009

Topics: Targeted anti-VEGF in DME

Indian AMD treatment guidelines

Comparison of standard fluence PDT plus intravitreal ranibizumab versus reduced fluence PDT plus intravitreal ranibizumab for CNVM secondary to age-related macular degeneration

CME, Miraj Ophthalmic Association, Miraj. February 14, 2010

Topics: Gene therapy in ophthalmology

Sutureless vitrectomy

#### Tapas Ranjan Padhi

#### **National**

#### Free paper

 ${\it CME, Orissa\ State\ Ophthalmological\ Society,\ Cuttack.}$ 

April 12, 2009

Topic: I/Vit Avastin for angioid streak with CNVM

#### Paper presentation

4th Indian AMD Congress, Novartis, Amby Valley, Maharashtra.

April 18-19, 2009

Topic: Challenging case (Lucentis)

#### Poster presentation

Second World ROP Congress, International NO-ROP group,

New Delhi. November 21-23, 2009

Topic: Establishing a screening net for ROP in a tertiary Eye care center in Eastern India – Initiation experience

68th Annual meeting of All India Ophthalmological Society, Kolkata. January 21-24, 2010

Topic: Clinical and Angiographic profile of a series of patients with Bietti Crystalline dystrophya

#### Gullapalli N Rao

#### International

#### Moderator

Global Eye Bank and Corneal Transplant Congress, Seattle, USA, June 15-17, 2009

Session: Eye bank leadership

#### **Participated**

WHO Monitoring Committee for the Elimination of Avoidable Blindness, World Health Organisation Headquarters, Geneva, Switzerland. September 3-4, 2009

#### **Invited speaker**

Mayo Clinic, Rochester, New York, USA, November 2, 2009 Topics: Can we eliminate avoidable blindness globally?

Role of research in prevention of blindness

25<sup>th</sup> Anniversary Programme of Combat Blindness Foundation, Madison, Wisconsin, USA, November 3-4, 2009

Topic: Global blindness and sustainable solutions

Brien Holden Lecture Series on the occasion of the launch of Brien Holden Vision Institute, Sydney, Australia. March 26, 2010

Session: Public health

Topic: VISION 2020 and avoidable blindness

#### **National**

#### **Invited speaker**

National SightFirst Committee of India meeting, Lions Clubs International, Mumbai. August 28-29, 2009

Topic: Emerging areas of blindness

Vaisakhi Eyecon 2009, 33<sup>rd</sup> annual meeting of Andhra Pradesh Ophthalmological Society, Visakhapatnam. October 1-4, 2009 Topic: The problem of blindness: what can ophthalmologists do?

#### Chair & Introduction

 $68^{\text{th}}$  Annual meeting of All India Ophthalmological Society,

Kolkata. January 21-24, 2010 Session: Future of ophthalmology

Session: Optimising community eye care in the third millennium

Topic: Global blindness

#### Keynote lecture

Session: Recent trends in ophthalmic practice management

Topic: Ophthalmic practice: Indian realities

#### **Invited speaker**

LVPEI Alumni – Indian Ophthalmology College Education Programme, Regional Institute of Ophthalmology, Guwahati. January 25, 2010

Topic: LVPEI and education

#### Suryasnata Rath

#### International

#### **Invited speaker**

World Congress of Paediatric Ophthalmology and Strabismus, Barcelona, Spain. September 12-13, 2009

Topic: Congenital eyelid anomalies

#### **National**

#### Free paper

CME, Orissa State Ophthalmological Society, Cuttack.

April 12, 2009

Topic: Orbital cysticercosis

#### **Invited speaker**

CME, MKCG Medical College, Berhampur, Orissa. May 26, 2009

Topic: Blepharoptosis, socket reconstruction

#### **Organizing Secretary**

Cutting Edge 2009, LVPEI, Bhubaneswar. August 15, 2009

Topics: Systemic approach to orbital tumours

Ocular adnexal lymphoma

#### Invited faculty

Indian Medical Association, Rourkela, December 20, 2009

Topic: Eye in systemic disease

68th Annual meeting of All India Ophthalmological Society, Kolkata. January 21-24, 2010

Free paper: Retina, retinoblastoma: presentation, treatment and outcome at a tertiary eye care center in

## Varsha Rathi

#### National

#### Free paper/Poster presentations

eastern India

68<sup>th</sup> Annual meeting of All India Ophthalmological Society, Kolkata. January 21-24, 2010

Topics: Boston ocular surface prosthesis: an Indian experience Fluorometholone acetate and increased intraocular pressure after LASIK

#### **Ashok K Reddy**

#### International

#### Free paper

43<sup>rd</sup> annual meeting of Ocular Microbiology and Immunology Group 2009, San Francisco, USA. October 23, 2009

Topic: Diagnosis of microsporidial keratitis by Polymerase Chain Reaction

#### Poster presentation

American Academy of Ophthalmology annual meeting, San Francisco, USA. October 24-27, 2009

Topic: Predisposing factors, clinico microbiological profile and treatment outcome of nontuberculous mycobacterial keratitis

5<sup>th</sup> International Conference on Ocular Infections, Bascom Palmer Eye Institute, Florida, USA. February 18-21, 2010

Free papers: Evaluation of three different polymerase chain reactions targeting internal transcribed spacer region, 18S rRNA and 28S rRNA gene for the detection of fungi in patients with keratitis Loop Mediated Isothermal Amplification (LAMP) Assay for the diagnosis of retinitis caused by Herpes Simplex Virus-I

#### **Invited speaker**

Topic: Laboratory evaluation of viral retinitis

#### **National**

#### Free paper

XXXIII National Congress of Indian Association of Medical Microbiologists, Mysore, India. November 6-8, 2009

Topic: Is microsporidial keratitis a seasonal infection in India?

#### Virender Sachdeva

#### International

#### Video presentation

American Academy of Ophthalmology 2009 meeting, San Francisco, USA. October 24-27, 2009

Topic: Interpretation of MRI in neuro-ophthalmological practice

#### Poster presentation

 $5^{\rm th}$  International Conference on Ocular Infections, Palm Beach, USA. February 18-21, 2010

Topic: Clinical profile and outcome in Burkholderia endophthalmitis

#### National

#### **Invited speaker**

Intraocular Implant & Refractive Society India annual meet, New Delhi. August 29-30, 2009

Topics: IOLs for all pediatric cataracts – current concepts and controversies

Surgical considerations in pediatric cataract

Visakha Ophthalmological Society meeting, Visakhapatnam. September 13, 2009

Topic: Concepts in evaluation and management of pediatric cataract

#### Convener, Instruction course/Invited speaker

Vaisakhi Eyecon 2009, 33<sup>rd</sup> annual meeting of Andhra Pradesh Ophthalmological Society, Visakhapatnam. October 1-4, 2009

Topics: Amblyopia: Basic concepts in evaluation and management Amblyopia: Generalisations and pharamacotherapy

Evaluation of a case of pediatric cataract

Idiopathic intracranial hypertension: Concepts in evaluation and management

Practical pearls in the evaluation of strabismus

Ocular trauma: Classification and evaluation of a case of ocular trauma

Traumatic optic neuropathy

# **Video**: Interpretation of MRI in neuro-ophthalmological practice **Free papers**

Topics: Clinico-pathological findings in Chronic Progressive External Ophthalmoplegia (CPEO) in a tertiary eye care centre in southern India

Unilateral disc edema due to idiopathic intracranial hypertension

#### Invited speaker/Moderator, session

16<sup>th</sup> Annual Conference of Strabismus Society of India, Hyderabad. December 19-20, 2009

Topic: Lost muscle - prevention and management

#### Video presentation

 $68^{th}$  Annual meeting of All India Ophthalmological Society, Kolkata. January 21-24, 2010

Topic: Interpretation of MRI in neuro-ophthalmological practice

#### Organizing secretary/Faculty

Eye on the Future: Pediatric Ophthalmology and Strabismus Update, LVPEI, Visakhapatnam. February 20-21, 2010

Topics: Evaluation of a case of restrictive strabismus

Current concepts in amblyopia Duane's retraction syndrome

Surgical management of pediatric cataracts

#### Srikant K Sahu

#### International

#### **Poster presentations**

American Academy of Ophthalmology annual meeting, San Francisco, USA. October 24-27, 2009

Topics: Microsporidial keratoconjunctivitis: emerging trends, clinical features, and treatment outcome

Infective scleritis: Clinicomicrobiological spectrum and treatment outcome

#### National

#### Free paper

CME, Orissa State Ophthalmological Society, Cuttack. April 12, 2009

Topic: Infection or inflammation: The dilemma continues

#### Invited faculty

Orissa State Society meeting, Bhubaneswar.

November 14-15, 2009

Topics: Recent management of dry eyes

Management of anterior segment trauma

#### Virender S Sangwan

#### International

#### Paper/Poster presentations

Association for Research in Vision and Ophthalmology annual meeting, Fort Lauderdale, Florida, USA. May 3-7, 2009

Topics: Age-related changes in the mechanical properties of the human ciliary body

Comparison of the power, diameter and optomechanical response of lenses from Indian and American eye banks

#### **Participated**

"R&D for Affordable Healthcare in India", Wellcome Trust Funding Meeting, London, UK. November 17-18, 2009

#### **Invited speaker**

Gordon Research Conference, California, USA. March 7-12, 2010 Topic: Cell based approach to ocular surface reconstruction



#### **National**

#### **Invited faculty**

Silver Jubilee programme, Symposium on Cornea, BW Lions Superspecialty Eye Hospital, in collaboration with Karnataka Ophthalmic Society, Bangalore. June 13-14, 2009

Topics: Refractive ocular allergy diagnosis and management Surface disease – when and how – vast conjuntivoplasty surgical

#### **Invited speaker**

National Conference of Shanti Swarup Bhatnagar award winners, Inauguration and Academic Programme, DAVV campus, Indore. July 17-19, 2009

Topic: Ocular stem cells - Clinical application

44th Annual meeting of UP State Ophthalmologic Society, BRD Medical College, Gorakhpur. November 14-15, 2009

Topics: Ocular surface reconstruction – AMG & limbal cell transplant

Cataract surgery in uveitis

 $9^{\text{th}}$  Annual meeting of Uveitis Society of India, Sankara Nethralaya, Chennai. December 4-6, 2009

Topic: Cataract surgery in uveitis

#### **G** Chandra Sekhar

#### International

#### Invited discussant

Consensus Meeting on Blood Flow, World Glaucoma Association, Fort Lauderdale, Florida, USA. May 2, 2009

#### Poster presentation

Association for Research in Vision and Ophthalmology annual meeting, Fort Lauderdale, Florida, USA. May 3-7, 2009

Topic: Is the visual field progression in glaucoma dependent on the severity of visual field loss at presentation?

Asia Pacific Academy of Ophthalmology (APAO) and American Academy of Ophthalmology (AAO) joint meeting, Bali, Indonesia. May 16-19, 2009

**Joint Chair, session**: Secondary glaucomas: complicated situations

Invited lecture: Glaucoma in spherophakia

#### Free papers

Topics: Comparison of the visual field loss in primary open angle glaucoma and primary angle closure glaucoma by visual field index

Is the disease progression in glaucoma dependent on the severity at presentation?

#### Member

International Agency for Prevention of Blindness (IAPB) Council of Members meeting, Melbourne, Australia. October 1-2, 2009

#### **Invited faculty**

Focus on Leading Advances in Glaucoma (FLAG), Advisory Board Meeting of ALCON, Langkawi, Malaysia.

January 30-31, 2010

Topic: Plateau iris syndrome

#### **National**

#### **Invited faculty**

Workshop on 'Strengthening clinical governance through evidence based health care', Indian Institute of Public Health, Hyderabad. August 1-2, 2009

Topic: Practice of evidence based medicine: A perspective

#### **Invited speaker**

XIX Annual conference of Glaucoma Society of India, Bangalore. November 6-8, 2009

Topics: Using newer technologies for glaucoma assessment Panelist for sessions: Glaucoma Diagnostics, Clinical Challenges and Angle Closure discussion

#### **Invited faculty**

MSD India EIF with Indian & International Experts, Hyderabad. November 22, 2009

Topic: Status of glaucoma care and treatment paradigms in India

#### Chair & Moderator

Update on "Glaucoma Management Trends", Alcon, Hyderabad. December 23, 2009

Topic: Diagnosis and management of PACG

#### **Invited faculty**

Silver Jubilee celebrations, Nagpur Academy of Ophthalmology, Nagpur. January 2-3, 2010

Topics: Missed glaucoma

Management of difficult glaucomas Fight against darkness, future beckons

Debate: Medical versus surgical management for primary open angle glaucoma

Ist Dr. Noel Moniz Memorial Lecture 2010, Cochin Ophthalmic Club & Kerala Glaucoma Interest Group, Kochi. February 7, 2010 Topic: Priniciples of management of glaucoma

Lucknow Ophthalmic Society, Lucknow. February 20, 2010 Topic: Current concepts in glaucoma diagnosis treatment

Silver Jubilee of UVSM Eye Care & Centre for Visually Challenged, Bhimavaram. March 21, 2010

Topic: Diagnosis on management of glaucoma

#### Sirisha Senthil

#### International

#### Invited speaker

Annual Ophthalmology Conference, Danang Eye Hospital, Danang City, Vietnam. September 9-12, 2009

Topic: Advances in surgical management of glaucoma and diagnosis of glaucoma

#### National

#### Invited faculty

Vaisakhi Eyecon 2009, 33<sup>rd</sup> annual meeting of Andhra Pradesh Ophthalmological Society, Visakhapatnam. October 1-4, 2009 Topics: Surgical management of co-existing cataract and

> glaucoma HRT in glaucoma diagnosis

#### Free papers

Topics: Glaucoma in spherophakia ROP in POAG Vs PACG using VFI

#### **Invited speaker**

Topic: SICS and trabeculectomy

#### **Videos**

Topics: Combined trabeculectomy and SFIOL in the management of aphakic glaucoma AGV and its complications

#### Invited speaker

XIX Annual Conference, Glaucoma Society of India, Bangalore. November 6-8, 2009

Rapid Free Paper: Rate of progressions of PACG Vs POAG using VFI

**Poster**: Glaucoma in microspherophakia **Video**: Deep sclerectomy with Co2 laser

#### Savitri Sharma

#### International

 $5^{\rm th}$  International Conference on Ocular Infections, Palm Beach, Florida, USA. February 18-21, 2010

#### **Invited speaker**

Symposium: Endophthalmitis

Topic: Laboratory diagnosis of endophthalmitis

#### **Moderator**

Symposium: Ocular microbiology laboratory update: Challenges and future trends

Topic: Update on parasitic pathogens: Current and future directions

#### Free papers

Topics: Microsporidial keratoconjunctivitis: An emerging ocular infection in Eastern India, prevalence

Relevance of methicillin resistance in staphylococci causing keratitis

Epidemiological features, diagnosis, and treatment of endophthalmitis in a tertiary care centre in India

#### **National**

#### Invited speaker

Consultative meeting of Indian Medical Professional Associations' Coalition against Tuberculosis (IMPACT), Indian Medical Association, New Delhi. April 5, 2009

Topic: What can IAMM do for impact?

#### **Invited faculty**

CME of Society for Indian Human and Animal Mycologists (SIHAM), Dr R P Centre, All India Institute of Medical Sciences, New Delhi. April 17, 2009

Topic: Diagnosis of fungal infections of the eye

Freshers' Meet, Sarojini Devi Eye Hospital, Hyderabad.

June 6, 2009

Topic: Infection control in operating rooms

#### Chief guest/Free paper

Annual meeting of Indian Association of Medical Microbiologists (Orissa chapter), MKCG Medical College, Berhampur, Orissa. August 9, 2009

Topic: Clinical and microbiological analysis of patients with endophthalmitis

#### **Invited faculty**

Vaisakhi Eyecon 2009, 33<sup>rd</sup> annual meeting of Andhra Pradesh Ophthalmological Society, Visakhapatnam. October 1-4, 2009 Topics: When, why and how: investigations for microbial

keratitis keratitis

How to investigate a case or a cluster of endophthalmitis?

33<sup>rd</sup> Annual Conference of Indian Association of Medical Microbiologists, JSS Medical College, Mysore. November 6-8, 2009 **Presidential oration**: Ocular microbiology: Asking questions, solving riddles and having fun on the job

Free paper: Microbiological diagnosis of infective endophthalmitis and its role in management

Orissa State Society meeting, Bhubaneswar.

November 14-15, 2009

Topic: Molecular methods in the diagnosis of corneal infections

All India Ophthalmological Society Annual Meeting, Kolkata. January 21-24, 2010

Free paper: Treatment outcome of epidemic

keratoconjunctivitis associated with microsporidia

(Adjudged Best Paper of the session)

Poster: Clinicomicrobiological analysis of 107 patients

with endophthalmitis in a tertiary eye care centre

#### **Invited speaker**

8<sup>th</sup> National Conference of Society for Indian Human and Animal Mycologists (SIHAM), Dr R P Centre, All India Institute of Medical Sciences, New Delhi. March 5, 2010

Topic: Current trends in the laboratory diagnosis of mycotic keratitis

#### **Mukesh Taneja**

#### International

#### **Invited speaker**

Cornea Session, Bascom Palmer Eye Institute, Miami, Fl, USA. April 29, 2009

Topic: Accommodative IOLs: Current status and future

#### **National**

#### Invited faculty/Moderator, session

Intraocular Implant & Refractive Society India annual meet, New Delhi. August 29-30, 2009

Topics: Accomodative IOL

Deep anterior lamellar keratoplasty and collagen cross linking

#### Organizing secretary/Faculty

Cornea Challenges - old and new, LVPEI, Hyderabad.

December 19-20, 2009

Topics: Anterior segment OCT

Complication related to PK

Meeting on 'Inflammation & anterior segment disorders', Hyderabad Ophthalmic Association meeting, Hyderabad. February 28, 2010

Topic: Contact lens induced red eye

#### **PVKS Varma**

#### International

#### **Participant**

Regional Ophthalmic Conference, Allergan – Asia Pacific, Singapore. March 19-20, 2010

#### **National**

#### Invited speaker

Visakhapatnam Ophthalmic Association meeting, Visakhapatnam. May 3, 2009

Topic: Angle closure glaucoma

CME and Interactive Programme, Sankar Foundation Eye Hospital, Visakhapatnam. May 30, 2009

Topics: Angle evaluation techniques – anatomical and clinical correlation

Current ophthalmology practice

#### **Invited faculty**

Vaisakhi Eyecon 2009, 33<sup>rd</sup> annual meeting of Andhra Pradesh Ophthalmological Society, Visakhapatnam. October 1-4, 2009

Topic: Ocular trauma: Basics of evaluation and management –
Diagnosis and management of glaucoma after trauma

#### **Invited speaker**

Visakhapatnam Ophthalmic Association meeting, Visakhapatnam, December 6, 2009

Topic: Ocular surface issues in the management of glaucoma

#### Organising faculty

Glaucoma Update, World Glaucoma Week celebrations, LVPEI, Visakhapatnam. March 7, 2010

Topic: Medical management of glaucoma



#### **P** Veerendranath

#### International

#### Poster/Paper presentations

Association for Research in Vision and Ophthalmology annual meeting, Fort Lauderdale, Florida, USA. May 3-7, 2009

Topics: Comparison of the power, diameter and optomechanical response of lenses from Indian and American eye banks Age-related changes in the mechanical properties of the human ciliary body

#### Geeta K Vemuganti

#### International

#### **Invited speaker**

Methodist Hospital, Texas, Houston, USA. April 30, 2009

Topic: Histopathology of retinoblastoma

Children's Cancer Centre, Houston, Texas, Houston, USA. April 30, 2009

Topic: Cancer stem cells in retinoblastoma

American Association of Ophthalmic Pathologists annual meeting, San Francisco, USA. October 23, 2009

Topic: Genotype-phenotype correlation in retinoblastoma

American Academy of Ophthalmology annual meeting, San Francisco, USA. October 24-27, 2009

#### Poster presentation

Topic: Primary soft tissue sarcoma of the orbit: A clinicopathological study of 59 cases

#### Invited speaker

Topic: Endogenous endophthalmitis and systemic disease

#### Invited keynote speaker

Ist International Conference on Stem Cells and Regenerative Medicine, Riyadh, Saudi Arabia. November 8-10, 2009

Topic: Stem cell research in ophthalmology: Good model of regenerative medicine

#### **Participant**

London Regenerative Medicine Network, Gustave Tuck Lecture Theatre, University College, London, UK. November 19, 2009

#### **National**

#### Invited speaker

International meeting of Ocular Cytology and Histopathology, Goa Medical College, Goa. April 3-4, 2009

Topics: Ocular cytology Stem cell therapy

Fourth Medical Development Congress, Indian Council of Medical Research, New Delhi. April 13-14, 2009

Topic: Stem cell research in ophthalmology

Workshop, Institute of Genetics and Hospital for Genetic Diseases, Osmania University, Hyderabad. July 6, 2009

Topic: Stem cell therapy

Asia Pacific Society meeting of Molecular Immunohistochemistry, Indian Academy of Pathology, Kochi. August 19-21, 2009

Topic: Molecular histochemistry and cancer stem cells in retinoblastoma

#### Poster: Orbital sarcomas

Workshop on "Advances in Genetic Diagnosis and Counseling," Institute of Genetics and Hospital for Genetic Diseases, Osmania University, Hyderabad. October 9, 2009

CYTOCON 2009 – CME on Head and Neck lesions, Postgraduate Institute of Medical Education and Research, Chandigarh. November 13, 2009

Topics: Eye and ocular adnexa

Stem cell research ophthalmology

#### Slide seminar

Topic: Impression cytology for Ocular Surface Squamous Neoplasia

#### **Invited speaker**

Indian Association of Ophthalmic Pathologists annual meet, Sankara Nethralaya, Chennai. December 7, 2009

Topics: Corneal pathology

Cytology and ocular pathology

33<sup>rd</sup> Annual meeting of the Indian Society of Cell Biology, University of Hyderabad, Hyderabad. December 11, 2009

Topic: Stem cell research in ophthalmology

International Symposium on "Emerging trends in Biomedical and Nanobiotechnology: Relevance to human health", Acharya Nagarjuna University, Guntur. December 21, 2009

Topic: Stem cell research in ophthalmology: Good model of regenerative medicine

Four Decade Trust Oration, SMS Medical College, Jaipur. December 24, 2009

Topic: Stem cell research: how do we make the bench to bedside journey

#### **Examiner**

PhD Viva, Manipal University, Bangalore. January 8, 2010

#### Invited faculty, Chair, session, Free paper

 $68^{\text{th}}$  Annual meeting of All India Ophthalmological Society, Kolkata. January 21-24, 2010

Indian Academy of Cancer Research, Amrutha Institute of Medical Sciences, Kochi. February 20-22, 2010

Topic: Cancer stem cells in retinoblastoma

Hyderabad Ophthalmic Society meeting, Hyderabad.

February 28, 2010

Topic: Inflammation: Cells, mediators and end damage

CME Programme, Bangalore Medical College and Research Institute, Bangalore. March 27, 2010

Topic: Approach to Occuloadenexal tumors (Slide seminar on interesting cases)

## **Honors & Awards**

#### India's only eye institute with four Bhatnagar awardees

**Dr Santosh G Honavar**, Associate Director and Head, Ophthalmic and Facial Plastic Surgery, Orbit and Ocular Oncology received the prestigious Shanti Swarup Bhatnagar Prize in Medical Sciences in September 2009 for his work on retinoblastoma, the most common eye cancer in children. He is part of the Ocular Oncology Team that manages retinoblastoma at the L V Prasad Eye Institute, Hyderabad.

The Shanti Swarup Bhatnagar Prizes are awarded annually by the Council of Scientific and Industrial Research, Government of India, for outstanding research, applied or fundamental, in Biological, Chemical, Earth, Atmosphere, Ocean and Planetary, Engineering, Mathematical, Medical and Physical Sciences. LVPEI is the only eye institute in India with four Bhatnagar awardees on its rolls — Director of Research, Padmashri Dr D Balasubramanian (Chemical Sciences, 1981), Dr Anil K Mandal, Head, Jasti V Ramanamma Children's Eye Care Centre (Medical Sciences, 2003) who was the first ophthalmologist to receive the award, and Dr Virender Singh Sangwan, Associate Director and Head, Cornea and Anterior Segment and Ocular Immunology and Uveitis Services for his work on stem cell transplantation, 2006.

#### Ramalingaswami Fellowship

In recognition of his outstanding research contributions, **Dr Shrikant Bharadwaj**, Scientist and Associate Optometrist, has been awarded the prestigious Ramalingaswami Fellowship by the Department of Biotechnology, Ministry of Science and Technology, Government of India for the year 2009-2010. He is the first eye researcher to receive the coveted award. Prof Ramalingaswami was one of LVPEI's founding trustees and an ardent supporter of LVPEI. Dr Bharadwaj has a PhD in Vision Science from the University of California – Berkeley School of Optometry, USA, and a post-doctoral fellowship from the Indiana University School of Optometry, USA. He returned to India last year to set up the Visual Optics and Psychophysics Laboratory at LVPEI, to study the development of vision in infants.

#### Subhabrata Chakrabarti

Chosen as a Young Affiliate of the Academy of Sciences for the Developing World (TWAS) from the Central and South Asian Region, and invited to present his work at its annual meeting at Durban, South Africa in October 2009

#### Santosh G Honavar

Senior Achievement Award, American Academy of Ophthalmology

#### Subhadra Jalali

Nominated member of the World Council of Retinopathy of Prematurity

#### Gullapalli N Rao

- ♦ Elected Chair of the Board of Australia-based International Centre for Eye Care Education (ICEE) at its meeting in Sydney, Australia on April 23, 2009. ICEE is a non-governmental, not-for-profit organization working towards elimination of needless blindness in Asia, Pacific Islands, Australia, Africa and Latin America.
- Received the AAO-Essilor Award 2009 from the American Academy of Optometry for significant and extraordinary advances in optometry and eye care internationally. Usually reserved for optometrists, the award is an affirmation that Dr Rao's contributions have gone beyond his native discipline of ophthalmology to impact eye care at large.

#### **Ashok Kumar Reddy**

Appointed Associate Editor, International Research Journal of Microbiology

#### Geeta K Vemuganti

- ♦ Invited to be a reviewer for project proposals on Translational Research submitted to the Medical Council Research Committee (Translational Stem Cell Research Committee), UK
- ♦ Elected ARVO (Association for Research in Vision and Ophthalmology) Program Committee member (Anatomy/Pathology Section) 2009 for 3 years; in the last year she will be chair of the section

**LVPEI shortlisted for BMJ award**: LVPEI was one of the top 5 organizations shortlisted for the Global Leadership in Health Care Delivery Award by the British Medical Journal award in the Global Leadership category. The Bill and Melinda Gates Foundation won the prestigious award. (April 2009)



#### International

#### **Mohd Javed Ali**

A long-term fellow in ophthalmic plastic surgery at LVPEI, Hyderabad, he received a scholarship for the International Congress of Ocular Oncology (ICOO) 2009 in Cambridge, UK. This is the first time such a grant has been offered at an International Society of Ocular Oncology (ISOO) meeting.

#### **D** Balasubramanian

Re-elected member of UNESCO's International Basic Science Programme Panel, Paris, France (April 2009-March 2012)

#### Subhabrata Chakrabarti

- Invited to continue on the editorial board of International Glaucoma Review – 2009-2010
- Invited to join the editorial board of Diabetes Review Letters
- Invited to Chair the Genetics Session at the third World Glaucoma Congress in Boston in 2009

#### **Taraprasad Das**

Re-elected Chairman, Scientific Committee of the Asia Pacific Vitreo Retinal Society (APVRS)

#### Subhash Gaddipati

Received Nature Publishing Group Travel Award to attend the Gordon Research Conference – Biology and Pathobiology of The Cornea at Ventura, CA, USA, and presented a poster. March 2010

#### **Prashant Garg**

Elected to the Executive Committee of the Ocular Microbiology and Immunology Group, USA. He is the first Indian ever on the committee.

#### **Usha Gopinathan**

Nominated Vice President of the Association of Eye Banks of Asia (AEBA) at its first Council Meeting held during the ACS international meeting in Tokyo, Japan. June 26, 2009

#### Santosh G Honavar

Best Video Award at the Film Festival of the Asia Pacific Association of Ophthalmology–American Academy of Ophthalmology Joint Congress 2009 at Bali, Indonesia. May 2009

#### **Inderjeet Kaur**

Awarded DST International Travel Grant for attending ARVO meeting. May 2009

#### Ramesh Murthy

Member of the champion team at the IQ Ophthalmic Quiz, Asia Pacific Association of Ophthalmology – American Academy of Ophthalmology joint congress at Bali, Indonesia. May 2009

#### Flag bearer in combating ROP

LVPEI's participation in the Second World ROP Congress at New Delhi (November 21-23, 2009) was substantial, and indicative of its leadership role in combating ROP. Four faculty and I fellow made a total of 6 invited and free paper presentations. Of the 90 presentations, 10% were by LVPEI faculty and alumni. **Dr Subhadra Jalali** was an invited member of the Host Committee, Program Committee and Scientific Committee of the Congress, in recognition of her contribution to ROP in the region.

#### **National**

#### **D** Balasubramanian

Received the Biospectrum Life Time Achievement Award in Biotechnology 2009 for immense contributions to the development of biotechnology in the country at the 7<sup>th</sup> BioSpectrum Awards (a part of the Cyber Media group) at Bangalore. December 2009

#### Soumyava Basu

Received BOYSCAST (Better Opportunities for Young Scientists in Chosen Areas of Science and Technology) fellowship for the year 2009-10 from the Department of Science and Technology, Government of India, to work on 'Molecular diagnostics for ocular tuberculosis' with Dr Narsing Rao at Doheny Eye Center, Los Angeles, USA.

#### Manjula Gurram

Won Young Scientist 'Ganne Subba Laxmi Endowment' Award at 27<sup>th</sup> Indian Association of Pathologists and Microbiologists – AP chapter meeting, Eluru. September 11-13, 2009

#### Pravin V Krishna

"Polished apple" award for Best Speaker at Eye-PEP, LVPEI, Hyderabad. September 23-27, 2009

Shiv Prasad Hardia award for Best Paper in Refractive Surgery, All India Ophthalmological Society meeting, Kolkata. January 21-24, 2010

#### Anil K Mandal

Elected Fellow of the National Academy of Medical Sciences



#### **Naresh Polisetti**

Young Scientist Gold medal for Best Oral Paper presentation by student at the International Symposium on Biomedical and Nanobiotechnology: Relevance to Human Health, 3rd annual convention of Association of Biotechnology and Pharmacy, Acharya Nagarjuna University, Guntur. December 19-21, 2009

#### **Ashok Kumar Reddy**

Silver Jubilee Medal for Best Paper in Parasitology for his work on microsporidia at the 33<sup>rd</sup> National Congress of the Indian Association of Medical Microbiologists, Mysore. November 2009. This is the third prize for LVPEI.

#### Sirisha Senthil

Best Video award at the annual Glaucoma Society of India 2009 meeting at Bangalore. November 2009. LVPEI's Central Audio and Video Unit also received acclaim for the high quality of the video.



#### Savitri Sharma

- Presented the 'Lifetime Achievement award in Microbiology' by the Indian Association of Pathologists and Microbiologists (Orissa chapter)
- Received 'AIOS-IJO Platinum award' for the year 2009 for the LVPEI publication of the article "Gopinathan U, Sharma S, Garg P, Rao GN. Review of epidemiological features, microbiological diagnosis and treatment outcome of microbial keratitis: Experience of over a

decade. Indian J Ophthalmol 2009; 57:273-9



LVPEI fellows **Surbhi Joshi** won Best Scientific Paper Award for her presentation and **Mohd Javed Ali** won Best Scientific Poster Award at the 31<sup>st</sup> Annual Conference of the Association of Radiation Oncologists of India, Hyderabad. November 2009. Both the paper and poster awards went to ocular oncology, a non-mainstream subspecialty, and both to LVPEI.

#### Geeta K Vemuganti

- Elected Fellow of Indian College of Pathologists and chosen as guide for a 6-month Fellowship Program in Ophthalmic Pathology at LVPEI, under the College's aegis
- Senior Scientist Gold Medal for Best Oral Presentation by faculty at the International Symposium on Biomedical and Nanobiotechnology: Relevance to Human Health, 3rd annual convention of Association of Biotechnology and Pharmacy, Acharya Nagarjuna University, Guntur. December 19-21, 2009

### Regional

#### **Taraprasad Das**

Received first Prof B Rajguru Oration award conferred by the Orissa State Ophthalmic Society held, Bhubaneswar. November 2009

#### Vidya Parsam

Young Scientist Runner-up Award, K V Rao Scientific Society Annual Research Awards 2009

#### Geeta K Vemuganti

- Association of Biotechnology & Pharmacy Senior Scientist Award at the International Symposium on 'Emerging Trends in Biomedical and Nanobiotechnology: Relevance to Human Health' at Acharya Nagarjuna Univeristy, Guntur. December 2009
- Four Decade Trust Oration on 'Stem cell research: How do we make the bench to bedside journey?' at SMS Medical College, Jaipur. December 2009





The Institute's **Kismatpur** and **Kallam Anji Reddy campus**, Hyderabad city, gardens won the first and second prize respectively in the category 'Gardens Maintained by Private Institutions', at the Andhra Pradesh Horticulture Department competition (December 2009). Mr Basha has been the constant gardener, with support from Mrs Mani Kumari and the other garden staff!

Mr Basha receives the trophy

The **Bhubaneswar campus** won two awards: the Dr P K Singhsamanta Memorial Running Trophy prize for the Best Landscaped Garden and the Third Prize for Best Teaching Institution Garden in the Flower Show 2010 Festival, organized by the Plant Lovers Association, Bhubaneswar. January 2010.

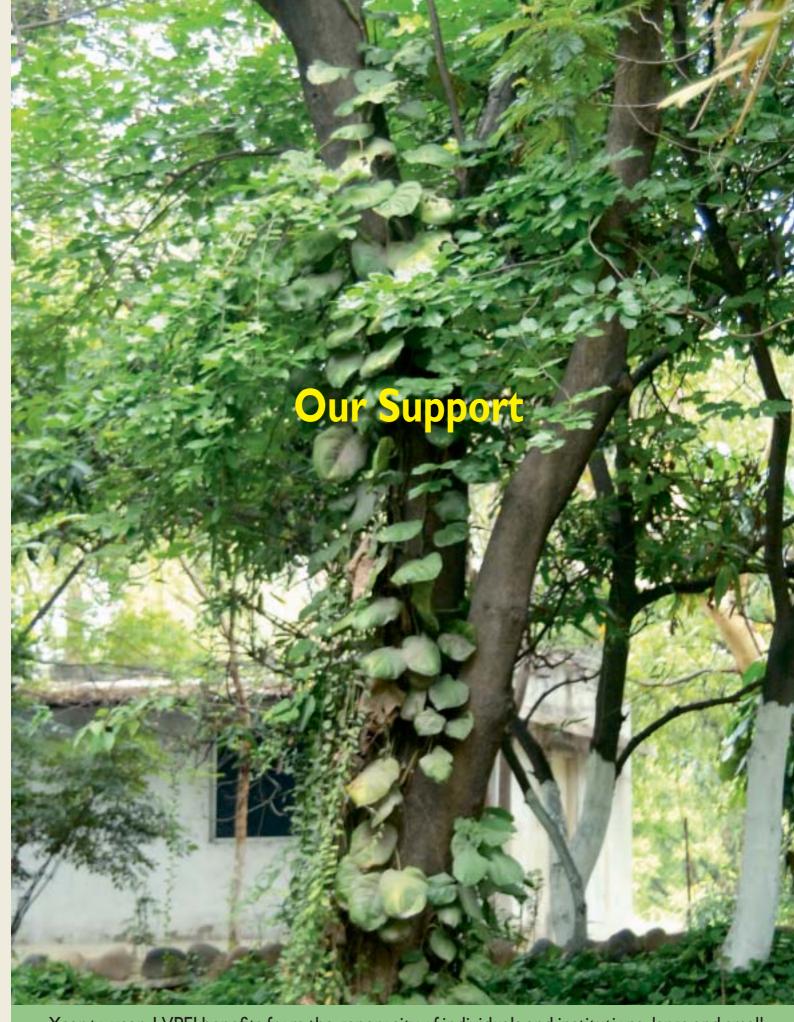
The campus also received the 'Pollution Control Excellence Award' under the category 'Health Care Units' from the State Pollution Control Board, Orissa.



Mr Bikash C Mohanta, Administrator, LVPEI receiving the award







Year to year, LVPEI benefits from the generosity of individuals and institutions, large and small, helping us extend the benefit of excellent eye care to those who cannot pay, and continue our cutting edge research and training activities. But all this began more than 23 years ago with foundational grants from a few remarkable people. Here are their stories...



The two Founding Organisations of L V Prasad Eye Institute were the Hyderabad Eye Institute and the Indo American Eye Care Society. The Founding Governing Board of Hyderabad Eye Institute included Mr A Ramesh Prasad, Prof V Ramalingaswami, Dr Narla Tata Rao, Mr K Rama Rao, Mr K P Prasad and Dr Gullapalli N Rao. The Founding Governing Board of Indo American Eye Care Society included Prof Brijen Gupta, Dr H Janardhan, Dr Y M Jay and Dr Gullapalli N Rao.

As L V Prasad Eye Institute approaches its Silver Jubilee Year in 2012, we remember our founding trustees and how crucial their support was in those early years. We are grateful for their helping hand and profile some of them here.



#### **Mr Ramesh Prasad**

An engineer by training, Mr Ramesh Prasad is Managing Director of Prasad Film Laboratories. A founder trustee, he is the longest serving member on the Hyderabad Eye Institute's governing board

He recalls, "My father, Shri L V Prasad, was a man of cinema, a humble man who worked his way up in tinsel town

Mumbai's film studios, where he arrived with just 100 rupees in his pocket and a heart full of dreams. He had little schooling and did not have much knowledge of Hindi or English. Starting at the bottom, he became a ticket collector/gatekeeper at Mumbai's famed Dreamland theatre. Years later, Shri L V Prasad's hugely popular film "Khilona" ran to packed houses at the same theatre and, one heady evening as they celebrated the Silver Jubilee

25<sup>th</sup> week, he recalled how he had served as a ticket collector there once! Eventually, he went on to win the prestigious Dadasaheb Phalke award for lifetime achievement. And the road in Banjara Hills, Hyderabad, where his production labs stand is named after him."

It was Dr Mullapudi Venkataratnam who brought Dr Rao's ambition of setting up a world class eye institute to the notice of Mr L V Prasad, who wanted to invest the profits from the L V Prasad Charitable Trust, after the huge success of his film "Ek duuje ke liye" in a worthy cause. "When we thought of supporting Dr Rao, we did not

know who he was, and we did not have any conditions," says Mr Ramesh Prasad, "We were impressed with his sincerity." Dr Rao's proposed eye hospital fit the bill perfectly – good eyesight is needed to enjoy films. The partnership was well-matched.

In retrospect, the family feels they have received back more than they invested! Mr Ramesh Prasad says the family never imagined that the Institute would grow into such a world renowned Centre of Excellence. The investment made by his father gives him tremendous satisfaction. "We are now in Bhubaneswar and Visakhapatnam also," he declares with pride, revealing his complete identification with the LVPEI eye care brand. "It is the best thing my father did in his life," he says. "We continue to support the Institute's work, which shows our total satisfaction with its progress. I am thrilled at the growing number of patients that LVPEI is able to treat free of cost. We will continue to support the institute in future as well."



Shri L V Prasad, then Chief Minister of Andhra Pradesh Mr N T Rama Rao and Dr Gullapalli N Rao at the foundation stone laying ceremony of L V Prasad Eye Institute in 1987





#### **Prof Brijen Gupta**

One of Dr Rao's earliest supporters, who continues to tirelessly raise funds in the United States for LVPEI. He is a pillar of support for Dr Rao, unstinting in his commitment and unquestioning in his support. While his name is familiar to LVPEI's management and faculty,

he prefers to keep a low profile. Prof Brijen Gupta studied at Banaras, Oxford, Yale and Columbia Universities and taught at Columbia and Universities of Chicago and Rochester. An outstanding writer and orator, his expertise spans many fields like history, politics, development and economics. He is considered a father figure among Rochester's Indian community and single-handedly nurtured the Indo-American Eye Care Society, the organization created to mobilize support for LVPEI in the United States. Indeed, the Indo-American Eye Care Society was a forerunner to the Hyderabad Eye Institute.



#### **G** Pratibha Rao

Pratibha Rao is one of the hitherto unrecognized persons who has played an important role in the creation and development of LVPEI. She has had a significant direct role as the first major donor for the project which catalysed the fundraising in the United States even before Hyderabad Eye Institute was founded. When the decision to return to India

was taken, she supported it unhesitatingly, leaving behind a very comfortable and settled life in the US. Over the years, she has encouraged Dr Rao to move forward with the project and has been a constant source of ideas and support for its evolution. In the initial phase, she single-handedly developed the entire aesthetic profile of the Institute and worked relentlessly to implement this, creating a unique LVPEI identity. This has led to the definitive description of LVPEI as a place that "does not look or feel like a hospital". Her next major task was to create a framework for the efficient functioning of our Education Centre. Her attention to detail and effort to ensure that everything was done right put this aspect of LVPEI on the right path. In its first few years the Education Centre benefited from her direct supervision. Following this, her role as Managing Editor of Indian Journal of Ophthalmology was critical for the transformation of this journal from a struggling, erratic, low quality publication into a journal of international repute. She personally motivated the ophthalmic industry to partner in this major effort to enhance the image of Indian ophthalmology, thus making the journal financially sound.

Much to our loss, she later moved on to a larger platform of democratic reforms, helping to found Lok Satta, a civil

society organization dedicated to governance reforms. She is also one of the founders of the Lok Satta Party, where she plays an important leadership role.

Indirectly, her unreserved support to Dr Gullapalli N Rao has helped him lead LVPEI through all these years with a strong focus.

In so many ways, Pratibha Rao has been responsible for what LVPEI is today.

#### Prof V Ramalingaswami

One of India's most eminent scientists ever and internationally renowned pathologist and nutrition scientist, Prof V Ramalingaswami became the second Director of the All India Institute of Medical Sciences, New Delhi, at a very young age. He later became Director



General of the Indian Council of Medical Research (ICMR) and transformed that organization significantly. In recognition, the headquarters of ICMR are named as "V Ramalingaswami Bhavan" after him.

Never has anyone in India's medical scene received such acclaim for his work and vision, nationally or abroad than Prof Ramalingaswami. A legend, he held many highlevel positions. He was invited by the World Health Organization to chair its global advisory committee on medical research and was adviser to UNICEF, Population Council, Canadian International Aid Agency, as well as many other agencies. He was also Professor at the Harvard School of Public Health and Visiting Professor at several leading universities across the world, including such prestigious ones as Harvard, Oxford, etc.

Prof Ramalingaswami inspired and supported Dr Gullapalli N Rao's plan to move to India to set up an eye care institute that would not only provide world class clinical care to all but also pursue frontline research. He also encouraged Dr D Balasubramanian, then Director of the Centre for Cellular and Molecular Biology, Hyderabad to head LVPEI's research wing.

As Director General of ICMR Prof Ramalingaswami took public health to the community by convincing the government that the problem of goitre – particularly in Kangra valley of the Himalayas – could simply be addressed through fortification of common salt with iodine. In ophthalmology he championed the idea that night blindness could be simply addressed through mega doses of Vitamin A.

He was truly a Renaissance man – a Sanskrit pandit and a Shakespearean scholar. At his stately home in New Delhi, he played host to the nation's most learned and powerful. When he relinquished his position on the board, he suggested that Dr MS Valiathan succeed him, another of LVPEI's eminent trustees.



#### Mr K P Prasad

An industrialist and entrepreneur, Mr K P Prasad is a mechanical engineer by training. On his return from the US, he became a successful industrialist and helped Dr Rao in laying the groundwork of LVPEI. He helped found and develop the Hyderabad Eye Institute, one of the two governing

bodies of LVPEI. He also helped in the recruitment of the staff in those early days. He remained a supporter of the Institute in all respects. He also funded one of the first ophthalmology fellowship positions. He and his wife have remained regular supporters of LVPEI.

#### Dr Narla Tata Rao

A colossus of India's power sector, Padmashri Dr Narla Tata Rao is hailed as the Father of Power Generation in Andhra Pradesh. He served as Chairman of the Andhra Pradesh State Electricity Board for many years during which time this sector witnessed significant growth in



the state. Dr Tata Rao was a committed public servant and a strict disciplinarian who worked hard to meet the needs of the people in the country.

His first contact with Dr Gullapalli N Rao happened when he went to the United States for cataract surgery in the early 1980s when intraocular lens implantation was not being practised much in India. Dr G N Rao operated on both his eyes and Dr Tata Rao became a big supporter of LVPEI and what it stood for. He encouraged Dr Gullapalli N Rao's return to India and provided significant help in the establishment of LVPEI.



#### Mr K Rama Rao

Mr K Rama Rao was Dr Gullapalli N Rao's patient in Sarojini Devi Eye Hospital. Practising at Rochester then, Dr Rao used to come occasionally from the USA and see patients at the hospital in the 1980s. Mr Rama Rao had his first corneal transplant in Vienna in the late 50s but needed another graft. Corneal tissues used to come in from Sri Lanka then and were not available easily. Worried about his failing vision due to keratoconus, Mr Rama Rao's sister Mrs Ramanamma, an ophthalmologist, met Dr Rao in 1982. The only option was for Mr Rama Rao to go to the US for his surgery, but it would be expensive. It was only a doctor-patient relationship, yet Dr Rao offered to waive his fees and operation costs if Mr Rama Rao could come to the US. But he also needed a place to stay. Dr Rao immediately offered his own home and Mrs Rao took care of him while he recovered from the surgery.

Mr Rama Rao was a lawyer while his wife Uma is a noted dancer. When Mr Rama Rao needed surgery in the other eye in 1983, Dr Rao asked him not to travel to the US again. He said he intended to move back to India and would operate on him then. Meanwhile he should manage with the good eye.

The then Chief Minister of Andhra Pradesh Mr NT Rama Rao wanted to encourage NRIs to return to India and set up industries. In 1984, land was allotted for the proposed L V Prasad Eye Institute in Kismatpur on the outskirts of Hyderabad city. But the building was finally located in Banjara Hills, a prime area of the city, with Mr L V Prasad's support.

In 1986, when the Institute was ready, Mr Rama Rao was invited to be a founding member of the Hyderabad Eye Institute's governing board. On October 17, 1986, at the ground-breaking ceremony, Dr Rao's stirring speech inspired Mr Rama Rao's sister-in-law Mrs Vijaya L Ramam to join the institute's accounts department. She rose to head the Administration Department and helped set up many of the institute's administrative systems.

Upon his parents' death, Mr Rama Rao and his sister donated their share in their ancestral property to Dr Gullapalli N Rao. He declared, "This is only a small donation. I have given Vijaya to you!" Later on, Mr Rama Rao's son, Mr Krishna Swaroop, provided funds for corneal fellowships at LVPEI.



# Your support makes it possible for all to see...

## **Founding Organisations**

### **Hyderabad Eye Institute**

**Founding Trustees** 

Dr Gullapalli N Rao Mr A Ramesh Prasad Prof V Ramalingaswami Dr Narla Tata Rao Mr K P Prasad Mr K Rama Rao

## **Indo American Eye Care Society**

**Founding Trustees** 

Prof Brijen Gupta Dr Gullapalli N Rao Dr Y M Jay Dr H Janardhan

## **Founders**

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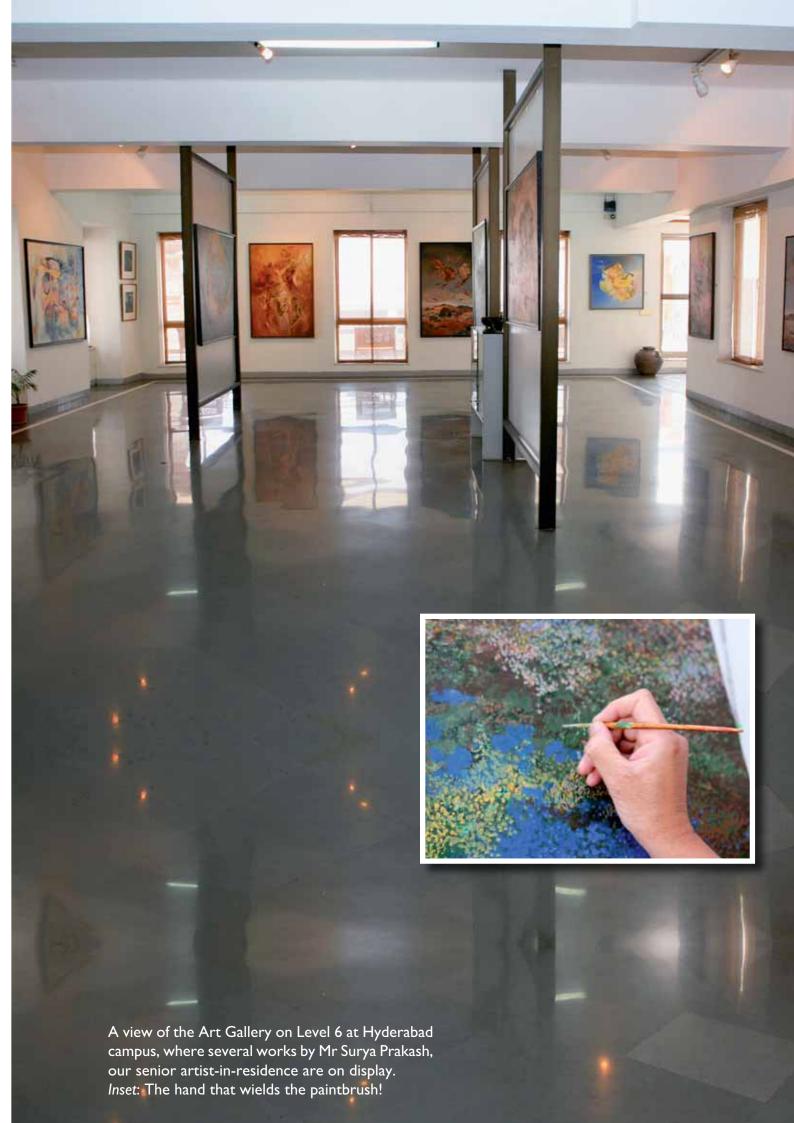
## **Our International & National Linkages**

#### International

· Alcon, USA · Allergan, USA · B P Koirala Institute of Health Sciences, Nepal · Bartimeus, The Netherlands • Bausch & Lomb, USA • Bristol Eye Bank, Bristol Eye Hospital, Bristol, UK • Cambridge University, UK · Canadian International Development Agency, Canada · Canadian International Service Organisation, Canada • Carl Zeiss, Germany • Case Western Reserve University, Australia • Centre for Eye Research & Technology, Australia • Centre for Eye Research Australia, Melbourne, Australia • Centre for Sight General Hospital, Kandy, Sri Lanka • Centre of Excellence in Molecular Biology, Lahore, Pakistan • Champalimaud Foundation, Portugal • Children's Hospital of Florida, USA • Children's Hospital of Philadelphia, University of Pennsylvania, USA • Christoffel Blindenmission, Germany • Cicendo Eye Hospital, Bandung, Indonesia Combat Blindness Foundation, USA • Cornea & Contact Lens Research Unit, Australia • Dr Wahidin Sudiro Husodo General Hospital, Indonesia • Duke University, Durham, USA • Eye Sight International, Vancouver, Canada • Fred Hollows Foundation, Australia • Fund Incorporated, Australian Federation of University Women (AFUW) and Queensland branch, Australia • General Hospital, Nagoda, Kalutara, Sri Lanka • Harvard University, Cambridge, MA, USA • i2 Foundation, Texas, USA • Institute of Eye Research, Sydney, Australia • International Association for Contact Lens Education, Australia • International Center for Eye Care Education, Australia • International Federation of Eye & Tissue Banks, Baltimore, USA • Islamia Eye Hospital, Dhaka, Bangladesh • Johns Hopkins University, Baltimore, USA • Jules Stein Eye Institute, University of California, Los Angeles, USA • Kenyatta National Hospital, Kenya, Africa • Korle-Bu Teaching Hospital, Ghana, Africa • Lighthouse International, New York, USA • Lions Eye Institute, Australia • Lions International, USA • London School of Tropical Hygiene & Medicine, UK • Massachusetts Eye and Ear Infirmary, Boston, USA • Mayo Clinic, Rochester, USA • Moorfields Eye Hospital, London, UK • National Institute of Ophthalmology & Hospital, Dhaka, Bangladesh • National Institute of Sensory Organs, Tokyo, Japan • National Institutes of Health, Bethesda, MD, USA • Northwest Lions Eye Bank, Seattle, USA • Northwestern University, Evanston, IL, USA • Ohio State University, Columbus, USA • Operation Eye Sight Universal, Canada • ORBIS International, New York, USA • Pakistan Institute of Community Ophthalmology, Peshawar, Pakistan • Pharmacia & Upjohn, Sweden • Queensland University of Technology, Brisbane, Australia • Rotary International, USA • Santen Inc., USA • School of Medicine and Dentistry, University of Rochester, Rochester, USA • Service de Biologie Cinique Institut Salah Azaiz, Tunisie • Sightsavers International, UK • State University of Rochester, USA • SUNY School of Optometry, New York, USA • Tel Aviv University, Israel • The Cooperative Research Center for Eye Research & Technology, Australia • The Hadley School for the Blind, Illinois, USA • The Tun Hussein On National Eye Hospital and the Malaysian Association for the Blind, Kuala Lumpur, Malaysia • Tubero, Sendai University, Japan • Tufts University of Medicine, Boston, MA, USA • University of Aberdeen, Scotland, UK • University of Florida, Gainesville, FI, USA • University of Heidelberg, Germany • University of London, UK • University of Melbourne, Melbourne, Australia • University of Nairobi, Kenya • University of New South Wales, Australia • University of Nottingham, Nottingham, UK • University of Ottawa, Canada • University of Rochester Eye Institute, University of Rochester, New York, USA • University of South Carolina, USA • University of Sydney, Australia • University of Tennessee, Memphis, Tennessee, USA • University of Toronto, Canada • University of Udine, Italy • University of Waterloo, Canada • Vanderbilt University, USA • Vision CRC, Australia William Beaumont Hospital, Michigan, USA • Wills Eye Hospital, USA • World Health Organization, Switzerland • Yangon Eye Hospital, Myanmar • Yayasan Penyatun Wyata Guna, Indonesia.

**National** 

· Action on Disability and Development India, Bangalore · Ali Yavar Jung National Institute for the Hearing Handicapped, Secunderabad • Anthropological Survey of India, Kolkata • Aravind Eye Hospital System, Madurai • Benares Hindu University, Varanasi • Bhabha Atomic Research Centre, Mumbai • Bio-Medix Optotechnik & Devices Pvt. Ltd., Bangalore • Birla Institute of Technology and Science, Pilani • Blind People's Association, Ahmedabad • Calcutta University, Kolkata • CBR Forum, Bangalore • Centre for Cellular and Molecular Biology, Hyderabad • Centre for DNA Fingerprinting and Diagnostics, Hyderabad • Centre for Human Genetics, Bangalore • Consolidated Products Corporation Pvt. Ltd., New Delhi • Council for Advancement of People's Action, New Delhi • Council of Scientific & Industrial Research, Government of India, New Delhi • Department of Biotechnology, Government of India, New Delhi • Department of Science & Technology, Government of India, New Delhi • Eye Bank Association of India, Hyderabad • Guru Nanak Dev University, Amritsar • Holy Cross College, Tiruchirappalli • Indian Council for Medical Research, New Delhi • Indian Institute of Chemical Biology, Kolkata • Indian Institute of Information Technology, Hyderabad • Indian Institute of Science, Bangalore • Indian Institute of Technology, Chennai • Indian Orthocane Surgicals, Chennai • Indian Statistical Institute, Kolkata • International Human Resource Development Centre, Coimbatore • Jammu University, Jammu • JPM Rotary Eye Hospital, Cuttack • Micro Vision, Ahmedabad · Milmet Laboratories Pvt. Ltd., Ahmedabad · National Association for the Blind, Mumbai · National Brain Research Centre, Gurgaon • National Institute for Mentally Handicapped, Secunderabad • National Institute for the Visually Handicapped, Dehradun • National Institute of Mental Health and Neuro Sciences, Bangalore · National Institute of Mental Health, Hyderabad · National Institute of Nutrition, Hyderabad · Sadguru Netra Chikitsalaya, Chitrakoot • Sankara Nethralaya, Chennai • Sir Ratan Tata Trust, Mumbai • Thakur Hari Prasad Institute for Research and Rehabilitation of Mentally Handicapped, Hyderabad • The Helen Keller Institute for Deaf and Deafblind, Mumbai • University of Hyderabad, Hyderabad • VIMTA Laboratories, Hyderabad • Vision Research Foundation, Chennai.





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