

September 4, 2014

The Members of the Vision Research Foundation

NOTICE

NOTICE IS HEREBY GIVEN TO THE MEMBERS OF VISION RESEARCH FOUNDATION THAT THE 30^{th} ANNUAL GENERAL MEETING OF VISION RESEARCH FOUNDATION WILL BE HELD ON, MONDAY. THE 29^{TH} SEPTEMBER 2014 AT 4.00 P.M. AT THE VRF BOARD ROOM IN THE 2^{ND} FLOOR OF KAMALNAYAN BAJAJ RESEARCH CENTRE, VISION RESEARCH FOUNDATION, NO.41/18, COLLEGE ROAD, CHENNAI – 600 006. THE AGENDA FOR THE MEETING IS GIVEN BELOW:

<u>AGENDA</u>

- 1. To consider and adopt the Annual Report of the Hon. Secretary for the year 2013-14.
- 2. To consider and adopt the Audited Income and Expenditure Account for the year ended March 31, 2014 and the Balance Sheet as at that date together with the Report of the Auditors thereon.
- 3. To appoint statutory auditors for the financial year 2014–15 and to fix their remuneration.
- 4. To appoint the following Members to the Board of Management in the vacancies caused by their retirement, who are eligible for re-appointment.

Name

Dr. S S Badrinath
Mr. V Vaidyanathan
Dr. S B Vasanthi
Mr. R Rajagopal
Dr. S Bhaskaran
Dr. M S Swaminathan
Dr. H N Madhavan
Dr. Lingam Gopal
Dr. J Biswas
Dr. Tarun Sharma
Dr. L Vijaya

Category of Membership

Founder Member Founder Member Founder Member Donor Member Honorary Member Honorary Member Honorary Member Honorary Member Honorary Member Honorary Member

Kindly make it convenient to attend the meeting.

DR TARUN SHARMA HONY. SECRETARY

Note:

Explanatory statement for Item 4 of the Agenda is attached.



Explanatory Statement

Refer Item No 4 of the Agenda

The following members were appointed to the Board of Management for a period of three years at the 27^{th} Annual General Meeting held on 29^{th} September 2011 :-

Name

Dr. S S Badrinath Mr. V Vaidyanathan Dr. S B Vasanthi Mr. R Rajagopal Dr. S Bhaskaran Dr. M S Swaminathan Dr. H N Madhavan Dr. Lingam Gopal Dr. J Biswas Dr. Tarun Sharma Dr. L Vijaya

Their term of appointment expires at the end of the Annual General Meeting on 29.09.2014. As per 16(xiv) of the Bye-laws of the Foundation read with Section 15 (5) of the Tamil Nadu Societies Registration Act 1975, they are eligible for reappointment to the Board of Management.



BOARD OF MANAGEMENT

Mr. R Rajagopal	President
Dr Tarun Sharma	Honorary Secretary
Mr. R S Falor	Honorary Treasurer

Members of the Board

Dr S S Badrinath Dr S Baskaran Dr J Biswas Mr Homi C H Bhabha Dr Lingam Gopal Dr. H N Madhavan Dr T S Surendran Dr M S Swaminathan Mr V Vaidyanathan Dr S B Vasanthi Dr L Vijaya

Member Member Member Member Member Member Member Member

Member

Dr. Rama Rajaram Dr. Ronnie Jacob George Dr. S Krishnakumar Advisor Director – Research Deputy Director – Research

Administrative Committee

Dr. S. S. Badrinath (Chairman of Committee) Mr. G. Ramachandran Mr. Sugal Chand Jain Mr. R. Rajagopal Mr. R. S. Falor Dr. Tarun Sharma Dr. S. Bhaskaran Dr. T. S. Surendran Dr. Pramod Bhende Dr. K. S. Vasan (and in his absence Ms. Akila)

Dr. K. S. Vasan Chief Operating Officer Senior General Manager Mrs. Akila Ganesan Deputy General Manager Mrs. G Susila Manager Mr S Narayan Auditors M/s S Viswanathan Chartered Accountants, Chennai HDFC Bank, Chennai - 600 034 Bankers State Bank of India, Chennai -600 034 Indian Overseas Bank, Chennai - 600 006 **Registered Office** New No.41, Old No.18, College Road Chennai - 600 006



ETHICS SUB-COMMITTEE MEMBERS

Justice Mohan S. Dr. Tarun Sharma Dr. T Santha Devi Dr. Bakulesh M. Khamar Dr. Manjula Dutta Dr. Ronnie Jacob George Prof. H N Madhavan Dr. S Krishnakumar Dr. Lingam Gopal Dr. T S Surendran Prof. N Vizheenathan Mrs. Radhika Krishnan Lion G V Raman Dr. Rama Shankar Verma Mrs. Sujatha Viswanath

RESEARCH SUB-COMMITTEE MEMBERS

Dr. Ronnie Jacob George Dr. Lingam Gopal Dr. Tarun Sharma Dr. J. Biswas Dr. S Krishnakumar Dr. T Santha Devi Prof. H N Madhavan Dr. Rama Shankar Verma

RESEARCH CELL COMMITTEE MEMBERS

- Dr. Ronnie Jacob George Dr. Lingam Gopal Dr. Tarun Sharma Dr. H N Madhavan Dr. L Vijaya Dr. S Krishnakumar Dr. Sumita Agarkar Dr. K N Sulochana Dr. J Biswas Dr. R R Sudhir Dr. Vikas Khetan Dr. Kalpathy R K Easwaran
- Dr. Prema Padmanabhan



STEM CELL RESEARCH ETHIC SUB COMMITTEE

Prof. Dr. Rama Shankar Verma Dr. Tarun Sharma Dr. H.N. Madhavan Mrs. Radhika Krishnan Dr. S Arumugam Prof. N. Veezhinathan Lion G V Raman Dr. N Pandiyan Dr. Ronnie George Dr. Rama Rajaram Dr. Rosy Vennila

INSTITUTIONAL BIOLOGICAL SAFETY COMMITTEE

Dr. H.N. Madhavan Dr. Gunasekar Dr. M Natarajan Mr. S Narayan Dr. S Krishnakumar



ANNUAL REPORT FOR THE YEAR 2013-14

Report of the Honorary Secretary to the Members of the Foundation

It gives me great pleasure to welcome you all to this 30th Annual General Meeting of our Foundation. I am pleased to present the Thirtieth Annual report of the Vision Research Foundation. The twenty nineth Annual General Meeting of the Foundation was held on 28th September 2013 in which the Annual Report and the Audited Accounts of the Foundation for the financial year ended 31st March 2013 were approved by the members and M/s. S Viswanathan, Chartered Accountants, were re-appointed as Auditors for the financial year 2013-14.

The donations received during the year under report were Rs.642.40 lakhs as compared to Rs.518.04 lakhs in the previous year. The gross total income for the year under review was Rs.1220.53 lakhs including research grants and interest on deposits. The total expenditure before providing depreciation was Rs.916.72 Lakhs resulting in a cash surplus of Rs.303.81 lakhs. After considering depreciation for the year, there was a net surplus of Rs.58.31 lakhs, which was carried over to the capital fund account. It has been decided that the electricity charges should be borne by the foundation and accordingly, provision has been made for the year ended 31st March 2014. Further, it was decided to create liaibility for gratuity and also for the leave encashment for the previous years in the current financial and accordingly, the foundation obtained a report from the Consultant Actuary for the estimated liability and the same has been accounted and reflected in the balance sheet as reduction in the capital fund.

Summary of Source and applications are as follows:

Sources		Rupees in Lakh	
1.	Cash Surplus	303.81	
		303.81	
Applications of Funds			
1. 2.	Increase in Fixed Assets Increase in Net Current Assets	7.68 296.13	
		303.81	



The foundation has received a sum of Rs.482.87 lakhs as research grants and Rs.31.15 lakhs as project grants during the year under review as per the details given below

	Rs. in Lakhs	
Research Grants – Basic Science	2013-14	2012-13
1. Council of Science & Industrial Research	21.10	27.80
2. Indian Council of Medical Research	125.94	165.30
3. Department of Biotechnology	137.73	247.83
4. Department of Science & Technology	47.05	61.34
5. Department of Atomic Energy	31.03	15.81
6. Life Sciences Research Board	11.30	14.51
7. National Programme on Micro & Smart Systems	7.24	6.78
8. Sumatichandra Mehta Charitable Trust	0.14	2.47
9. Chect Foundation	.09	2.43
Total	381.62	544.27
Clinical Science		
10. Allergan Pharmaceuticals Dev. Center (I) P. Ltd	.65	2.69
11. Excel Life Sciences Pvt Ltd.	6.13	3.86
12. Others	.00	0.73
13. National Childhood Cancer Foundation	.00	0.36
14. Quintiles Ltd	1.69	.00
15. Novartis India Ltd	2.68	2.19
16. GVK Biosciences Pvt Ltd	1.64	1.36
17. University of Pennsylvania	1.73	.00
18. Johnson & Johnson	86.73	26.13
Total	101.25	37.32
Project Grants		
19. Chennai Willingdon Corporate Foundation	31.15	28.62
Total	31.15	28.62
Grand Total	514.02	610.21



Research Activities:

Research activities during the financial year were satisfying and encouraging. A large number of projects were submitted to the Department of Science and Technology, Department of Bio-Technology, Council of Scientific and Industrial Research and Indian Council of Medical Research.

The projects which were under consideration by these Govt. agencies as on date are as under:

Title of the Project	Funding Agency	Grant Amount for 2014-15 (Value in Rs.)
Design and Development of Novel Anti- Angiogenic molecules by targeting polysaccharide binding domain of Carbonic Anhydrase IX through structural bioinformatics methods and studies on Cell Culture Methods (P.I.: Dr. V Uma Shankar)	Indian Council of Medical Research	10,69,000.00
Genome wide association studies for Pharmacogenomics of steroid response in Eye (P.1: Dr. Srujana Chitipodu)	Indian Council of Medical Research	31,34,000.00
Regulation of LOX expression in Lens epithelial cells and trabecular endothelium (P.I.: Dr. N Angayarkanni)	Indian Council of Medical Research	22 Lakhs
Design and development of novel anti- angiogenic molecules by targeting Carbonic Anhydrase Polysaccharide Binding Domain through Structural Bioinformatics methods and studies on cell culture models. (P.I.: Dr. K N Sulochana)	Indian Council of Medical Research	25 Lakhs
Peripheral Blood Gene Expression Profiling In Eales Disease (P.I.: Dr. K Coral)	Indian Council of Medical Research	11,10,000.00
Effect of riboflavin / UVA in treating patients with infectious keratitis: A pilot study on human subjects. (P.I.: Dr. Prema Padmanaban)	Indian Council of Medical Research	32,41,900. 00
Effect of different concentrations of lignocaine on the fibroblasts growth: An in- vitro study. (P.I.: Dr. H N Madhavan)	Indian Council of Medical Research	22,21,600. 00
A study on the antiviral effect of a novel drug - aganocide against Human Adenovirus , Hepatitis C virus (HCV using 2D and 3D model of cell culture system by investigating the differential viral proteins expressed (P.I.: Dr. J Malathi)	Indian Council of Medical Research	63,92,400. 00
Meta genomics of Conjunctival microbial flora in normal versus diseased conditions (Uveitis & Dry Eye syndrome) in Patients attending a tertiary Eye Hospital in Chennai – The first study in India (P.I.: Dr. Lily Therese)	Dept. of Biotechnology	2,22,96,133 .00



Identification of SNP variants modifying the		
response to intraocular pressure lowering drugs in ocular hypertensive and primary open angle glaucoma patients in Indian population	Indian Council of Medical Research	37,69,990.00
Intervention of ciliopathy genes in the molecular pathology of BBS in Indian population	Indian Council of Medical Research	47,61,000.00
Biomarker discovery in Glaucoma: Genomic, Proteomic and Metabolite approach	Dept. of Science & Technology	3,15,00,000.00
Protein therapeutic approach for the treatment of Retinoschisis	FFB, USA	1,53,23,825.00
Identification of PIWI proteins/piRNA in human ocular tissues and dissecting their role in Diabetic Retinopathy (DR)	Indian Council of Medical Research	39,00,000.00
Whole exome sequencing in Leber congenital amaurosis to identify novel gene(s)	Dept. of Biotechnology	1,04,07,800.00
Exosomal miRNA as Biomarkers of early and late stage retinoblastoma (P.I.: Dr. S. Krishnakumar)	Dept. of Biotechnology	56 lakhs
Assessment of critical EpCAM mediated oncogenic signals in retinoblastoma: To valuable candidate for therapeutic intervention P.I.: Dr. S. Krishnakumar)	Indian Council of Medical Research	66 lakhs
Investigating the effects of HIV-1 proteins in retinal blood brain barrier degeneration (P.I.: Dr. Nivedita Chatterjee)	Dept. of Science & Technology	6162400
Investigating the dysregulation of the endocannabinoid system by miRNA: identification of potential biomarkers from in vitro studies in retinal glia (P.I.: Dr. Nivedita Chatterjee)	Indian Council of Medical Research	3876600
The effect of endocannabinoids on stemness in muller glia driving inflammation (P.I.: Dr. Nivedita Chatterjee)	Council of Scientific & Industrial Research	41.5 lakhs
To investigate the role of CD24 as a putative cancer stem cell marker in retinoblastoma and develop a DNA aptamer for targeting CD24 positive cells P.I.: Dr. S. Krishnakumar)	Dept. of Science & Technology	2 Crores
Toxin-Antitoxin based targeting of retinoblastoma P.I.: Dr. S. Krishnakumar)	Indian Council of Medical Research	70 Lakhs
Study on peptide nanoparticles for the drug delivery to the posterior segment of the eye (Dr. J Narayanan)	Dept. of Science & Technology	59.30 Lakhs
Retinoblastoma detection and therapy using Raman Spectroscopy (Dr. Sailaja Elchuri)	Dept. of Science & Technology	2 Crores

During the year, four meetings of the Board of Management were held and Research & Ethics Sub-Committees met four times.



Manpower Details :-

Manpower	As on <u>31st Mar 2014</u>	As on <u>31st Mar 2013</u>
President	01	01
Directors	05	05
Advisor-Projects	01	00
Deputy Director	01	01
Head of the Department	03	03
Senior Research Fellows	18	19
Junior Research Fellows	11	19
Research / Project / Technical Asst	05	00
Research Associate	01	00
Lab Technicians	01	04
Senior Scientists	02	01
Scientists	00	01
Junior Scientists	08	12
Executives / Staff / Technicians	23	34
Professors	01	01
Lecturers	02	02
Readers	03	02
Post Doctoral Fellow	05	02
Research Coordinator	01	01
Asst. Professor	01	00
Bio-statistician	01	00
Part Time Scientists	58	56
Total	152	164

Conclusion:

I would like to take this opportunity to place on record my gratitude for all the guidance extended to me by the President Mr. R Rajagopal, Hon. Treasurer Mr. R S Falor, Dr S S Badrinath, President & Chairman Emeritus, Medical Research Foundation, Board Member and Chairman of Medical Research Foundation, Dr. S Bhaskaran, Chief Operating Officer, Dr. Kris S. Vasan, Director of Research, Dr. Ronnie Jacob George and Deputy Director of Research, Dr. S Krishnakumar.

I would like to mention that the achievements and awards received by the scientists, details of completed projects and ongoing projects, conferences attended and the articles published in the national and internation journals are given separately.



My thanks are also due to the Auditors, M/s. S Viswanathan particularly to their partner Mr. Chella K Srinivasan for their active and invaluable support and our Bankers, HDFC Bank and State Bank of India for their support and co-operation.

I also thank the Internal Auditors, M/s. Sundar, Ranganath & Srinivasan, Chartered Accountants, for their active support in conducting internal audit of the Foundation.

Mr. S Narayan, Manager, played an active role in managing the finance and administrative activities of the Foundation. I thank him for his help and assistance. I also wish to thank Mr. N Sivakumar for his support, especially in completing the income tax assessment of the foundation upto the financial year ended 31st March 2011.

The Board of Management place on record their appreciation of the invaluable contribution made by the Research Scientists, Consultants, para-medics and other employees to the continued success of the institution.

Dr Tarun Sharma, MD, FRCSEd, MBA Hony. Secretary Vision Research Foundation



HONOURS & AWARDS

- Dr.T S Surendran appointed as Consultant, Pediatric Ophthalmologist for USIS (United States of Information Services) Consulate staff children.
- Dr. Muna Bhande & team written a Second Edition of "Atlas of Ophthalmic Ultrasound and Ultrasound Biomicroscopy" published by Jaypee Brothers.
- Sankara Nethralaya Elite School of Optometry (ESO) received the Limca National Record on 15.04.2014. ESO set a Limca record on World Sight Day - 8th October, 2012. The most number of vision screenings for 8,469 school children was conducted by ESO in 38 different schools between 8.30am to 4.30pm. The screening was done as a three-phased protocol including diagnosing refractive errors, prescription generation and diagnosis if eye ailments.
- Dr. H. N. Madhavan recognized as the "PIONEER MOLECULAR MICROBIOLOGIST IN INDIA" for the detection of infection agents in the clinical specimens by the Centre for Disease Control (CDC), Atlanta, USA.
- Dr. J. Biswas received Dr. Narsing Rao Gold Medal in Uvea session at the All India Ophthalmological Society (AIOS) Conference held from 6th to 9th February 2014 for the paper presentation on "Polymerase Chain Reaction (PCR) of intraocular fluid for Mycobacterium Tuberculosis (MTB) in various types of choroiditis in a referral eye centre in India".
- Dr. S. Ambika received the Best Paper Award "Diffusion weighted imaging a predictor of visual outcome in acute optic neuritis" at the All India Ophthalmological Society Meeting held between 6th and 9th February 2014.
- Dr. Rajiv Raman received the Silver Award for Best paper "Foveal slope measurements in subjects with high risk of age related macular degeneration at the All India Ophthalmological Society Meeting held between 6th and 9th February 2014.
- Dr M. Y. S. Prasad (Distinguished Scientist & Director Satish Dhawan Space Centre, (SHAR) Sriharikota) inaugurated the Sri City Sankara Nethralaya on 14th April 2013, at Tada.
- Ms. Selvi received the Doctor of Philosophy (Ph.D) Award for her thesis "In vitro Studies on the Mechanism of Glucose Lowering Effect of Amino Acids in CHO-K1 & Adipocytes cell lines and In vivo Studies on the Amelioration of Molecular Changes in Retina of Streptozotocin Induced Diabetic Sprague Dawley Rats" on 16th April 2013 at BITS, Pilani.
- Dr. Tarun Sharma received the "Dr Sudha Sutaria Vitreoretinal Oration Award" at the Vidarbha Ophthalmic Society Meeting held on 6th & 7th April 2013 at Nagpur. He gave a presentation in "Management of Diabetic Macular Edema"
- Dr. R. Gayathri received the Prof. S. Krishnamoorthy Rao Award (Gold Modal) for her outstanding PhD thesis "Molecular technique to detect and identification of multi drug resistant tuberculosis" on 7th May 2013 at Sankara Nethralaya.



- Ms. M. Sowmiya, received the Doctor of Philosophy Award for her PhD thesis "Standardization and Application of Molecular Techniques for the Detection of Drug Resistance Exhibited by Bacterial Pathogens Isolated from Ocular Clinical Specimens" on 10th May 2013 at BITS, Pilani.
- Dr. Meenakshi received Dr Badrinath Medal of Honor for Excellence of Academic activities at the Tamil Nadu Ophthalmic Association (TNOA) Conference held from 9th to 11th- August 2013.
- Ms. Jaisy Samuel received a travel grant of \$1200 and waiver of registration fee for attending the International Society for Genetic Eye Diseases and Retinoblastoma, (ISGEDR) Meeting at Ghent, Belgium from 22nd to 24th August, 2013
- Mr. Y. Samson Moses received the "Doctor of Philosophy Award" for his PhD thesis "Application of Molecular methods in detection of mutation in UL23 gene of HSV and UL97 gene of Human Cytomegalovirus for drug resistance and evaluation of pp65" held on 18th September 2013 in "Tapovan" Chinmaya Heritage Center, Chennai.
- Dr. S. S. Badrinath received the 'Doyen of Madras' award in recognition of his selfless service to the society from the Ambassador Group of Hotels, Chennai on 29th September 2013.
- Ms. A. Shabna received the Swarnalatha Punshi Award for Best Research in Basic science for the year 2013.
- Dr.J.Subbu Lakshmi, Ms. Karthikka, Ms. Suganya, Mr. Sanket, Ms. Mangalangi.U, Ms. Sudha, Ms. Vinithakumari, Ms. Sushma Kalmodia, Ms. Nithya, Mr. Gopinath, Ms. M. Vimalin Jeyalatha, Ms. A. Shabna and Mr. N. Murugan, Research Scientists received the Travel grant of Rs.10,000/- each for attending Asia ARVO Conference at New Delhi from 28th to 31th October 2013.
- Dr. N. Soumittra, Mr. C. Sanket Dhirubhai , Mr. Sivasankar S, Ms. Vinitha Kumari, Ms. K.Sudha, Ms. Srilekha, received the Best paper Award in "Asia ARVO" Conference conducted at New Delhi 28th to 31th October 2013
- Dr J.Biswas, Mr. Gopinath, Mr. Anand Babu K, Dr. J. Subbulakshmi, Dr. J. Biswas, Ms. N. Srikrupa received the Best Poster Award in "Asia ARVO" Conference held at New Delhi 28th to 31th October 2013.
- American Academy of Optometrists awarded Ms Jameel Rizwana Hussain "Fellow of the Academy" for her thesis tilted "Factors influencing visual acuity outcome in the amblyopic eye and fellow eye in unilateral amblyopia" & poster on "Near point of convergence assessed using accommodative target and penlight with red/green filter in normal subjects and in Convergence insufficiency", on 26th October 2013, USA
- Ms. Karthikka won the lucky draw in the ASIA ARVO Conference at New Delhi for FREE REGISTRATION for attending ARVO 2014 Conference at USA.
- Ms. L. Dhanurekha, received the Young Woman Scientist Award in memory of Smt. Sreerangamma N. Narayan and Smt. Radhamani N. Anantha for the year 2013 at Sri. V.D. Swami Auditorium, Kamal Nayan Bajaj Research Centre on 6th November 2013



- Dr Sripriya Krishnamurthy received 2013 ACOIN award for Community Ophthalmology Program at the Association of Community Ophthalmologists of India meet held at Bhubaneswar from 9th to 10th November 2013.
- Dr J.Biswas received "Dr Samir Kumar Biswas Memorial Oration Gold Model Award", at the West Bengal Ophthalmological Society Meeting held at West Bengal on 21st November 2013.
- Dr. K. Coral received B.S. Narasinga Rao Best Poster Award for "Association of Copper in human retina and choroid in Age Related Macular Degeneration" at the 82nd Annual Meeting of Society of Biological Chemists (India), 03rd December 2013, University of Hyderabad,
- NDTV celebrated turning 25 years in December 2013 by honouring 25 leading Indians who have reached the pinnacle in their respective field, contributed to the society and left an indelible mark on the sands of time. NDTV honoured our Chairman – Emeritus, Dr. S S Badrinath, with the title "Greatest Global Indian Living Legend" for his significant 'Contribution to Medicine'. Our First Citizen of the Nation, Honourable President, Shri Pranab Mukherjee, presented the awards at Rashtrapathi Bhavan, New Delhi on 14th December 2013.
- Sankara Nethralaya received the "Best Single Specialty Hospital Ophthalmology" at the very prestigious CNBC TV18's India Healthcare Awards presented by ICICI Lombard on 23rd December 2013 at New Delhi.
- Dr. Subbulakshmi J received the International Travel Fellowship Award from Dept. of Science & Technology, for attending ARVO 2014 Conference at Florida, USA.
- Dr. K. N. Sulochana received the Indian Council of Medical Research (ICMR) International Fellowship Award of Rs.88, 900/- for the ARVO 2013 Conference held at USA in May 2013.
- Dr. Angarkanni N awarded the travel grant of Rs. 60,000/- for the ARVO 2013 Conference at USA under DBT CTEP Travel scheme.
- The book launch of the 'Atlas of Imaging in Ophthalmology' co-authored by Dr S. Ambika, Director, Neuro-Ophthalmology Department, Vision Research Foundation, Dr.Veena Noronha, Consultant Radiologist and Dr. Padmaja Minakshisundaram, Neuro-Ophthalmologist was held at the Sri VD.Swami Auditorium, Sankara Nethralaya on 8th January 2014. Dr G. Arjundas, Professor Emeritus, Madras Medical College, Chief Guest of the function and the other eminent Neuro- surgeons Dr Suresh Bapu, Dr. Balamurugan, Apollo Specialty Hospital, Chennai, Dr Siddharth Ghosh, Oncologist from Kharaghpur and Dr Smitha Vittal attended the function.
- Dr. Rajeswari Mahadevan received the "IACLE Contact Lens Educator of the Year" award for the Asia Pacific Region Conference on 1st March 2014.
- Dr Rajeswari was honored 'Fellow of the Scleral Lens Education Society' for specialty in scleral lens fitting. The Scleral Lens Education Society specializes in imparting knowledge and training to Contact Lens Practitioners in the science and art of fitting sclera lenses for corneal transplants and Ocular Surface disorders.



THE FIFTH Patent Certificate granted to the patentee Vision Research Foundation by the Patent office Chennai, Government of India for an invention entitled "Method for simultaneous detection and discrimination of Bacterial, Fungal, Parasitic and Viral Infections of eye and central nervous system" Patent No.: US 8,465,951 B2 in accordance with the provisions of the Patents Act 1970. The inventors are Chintalagiri Mohan Rao, Ikunchala Sridhar Rao, Puppala Venkat Ramchander, H. N. Madhavan, Savitri Sharma, Gita Satpathy, Venkata Banda Ravi Kumar.



RESEARCH PUBLICATIONS

PUBLISHED:

- Whole exome sequencing identifies mutations in LRIT3 as a cause for autosomal recessive complete stationary night blindness. Christina Zeitz, PhD; Samuel G Jacobson, Christian P Hamel, Kinga Bujakowska, Marion Neuillé, Elise Orhan, Xavier Zanlonghi, Marie-Elise Lancelot; Christelle Michiels; Sharon B Schwartz, Béatrice Bocquet; CSNB consortium; Aline Antonio; Claire Audier; Melanie Letexier, Jean-Paul Saraiva, Tien D Luu; Florian Sennlaub, Hoan Nguyen; Olivier Poch, Hélène Dollfus, Odile Lecompte; Susanne Kohl, José-Alain Sahel, Shomi Bhattacharya, Isabelle Audo. American Journal of Human Genetics. 2013 Jan 10;92(1):67-75.
- Five-year trend of competitiveness and knowledge-gaining attitude of university students; Evaluation based on an event of continuing health sciences education. *Fujio Takayama, Yoshiko Amikura, Sudhakar John, Vidyasagar Devaprasad Dedeepiya, Rajappa Senthilkumar, Govindan Venkataramani, Kottoorathu Mammen Cherian, Hajib Naraharirao Madhavan, David W Green, Masahiko Matsumoto, Shoji Suzuki, Masaru Iwasaki, Senthilkumar Preethy, Samuel JK Abraham.* Journal of Contemporary Medical Education 2013; 1(2): 92-99. 2013; 1(2): 92-99
- Novel mutations in the thymidne kinase gene of ocular herpes simplex virus isolate responsible for acyclovir resistance by in silico analysis. Samson Moses Y, Malathi J, Umashankar V, Sherlin and Madhavan H.N. International Journal of Computational Bioinformatics and In Silico Modeling. 2013, 2(4): 159-166
- Elucidation of Iron Binding Patterns through Insilico Approaches in Human Iron Binding Proteins. *Muthukumaran Sivashanmugam, Anusha Kuppuswamy, Umashankar Vetrivel, K.N.Sulochana.* International Journal of Therapeutic Applications, Volume 10, 2013, 11-18.
- Molecular characterization of flic gene by semi nested PCR for the detection of Salmonella enterica serovar typhi in the peripheral blood of patients from Chennai, India. Sowmiya M, Malathi J, Aarthi P, Vaidehi T, Madhavan HN. International Journal of Pharma and Bio Sciences. 2013. Apr; 4(2): (B) 284 291
- In silico Analysis of Novel Mutation ala102pro Targeting pncA Gene of M. Tuberculosis. Dhanurekha Lakshmipathy, Gayathri Ramasubban, Lily Therese, Umashankar Vetrivel, Muthukumaran Sivashanmugam, Sunitha Rajendiran, Sridhar R, Madhavan HN, and Meenakshi N. Journal of Computer Science & Systems Biology. Apr 2013; 6: 083-087.
- Indocyanine green angiography in posterior uveitis. Agrawal R V, Biswas J, Gunasekaran D – Indian Journal of Ophthalmology 2013. Apr. 61(4):148-59.
- Serpiginous choroiditis and acute retinal necrosis occurring in the same patient. Aditi Gupta, Biswas J. Indian Journal of Ophthalmology. 2013 Apr 10.



- Modulation of multidrug resistance 1 expression and function in retinoblastoma cells by curcumin. Seethalakshmi Sreenivasan, Sathyabaarathi Ravichandran, Umashankar Vetrivel and Subramanian Krishnakumar. Journal of Pharmacology & Pharmacotherapeutics. 2013 Apr; 4(2):103-9.
- Development of a novel reverse transcriptase polymerase chain reaction to determine the Gram reaction and viability of bacteria in clinical specimens. *Aarthi P, Bagyalakshmi R, Therese KL, Madhavan HN.* Microbiological Research. 2013 Apr 17. doi:pii: S0944-5013(13)00037-2.
- Novel epithelial cell adhesion molecule antibody conjugated polyethleneimine-capped gold nanoparticles for enhanced and targeted small interfering RNA delivery to retinoblastoma cells. *Mitra M, Kandalam M, Rangasamy J, Shankar B, Maheswari UK, Swaminathan S, Krishnakumar S* – Molecular Vision 2013 May 6; 19: 1029-38
- Leber's Congenital Amaurosis as the Retinal Degenerative Phenotype in Thiamine Responsive Megaloblastic Anemia: A Case Report. Srikrupa NN, Meenakshi S, Arokiasamy T, Murali K, Soumittra N. Ophthalmic Genetics. 2013 May 2.
- Prevalence and causes of low vision and blindness in an urban population: The Chennai Glaucoma Study. Vijaya L, George R, Asokan R, Velumuri L, Ramesh SV - Indian Journal of Ophthalmology June 2013.
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- Letter about photo essay on self-inflicted eye injury. Kumar Saurabh, Rupak Roy. Indian Journal of Ophthalmology Dec 2013
- Acute Retinal Necrosis: Clinical features and treatment outcomes. Rupak R, Chetan R, Bikramjeet P, Debmalya D, Biswas J. Ocular Immunology and Inflammation Dec 2013.
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- Harada disease: A case report and Literature Reviewed by Abhishek V, Biswas J Probable Vogt – Koyanagi - Journal of Tamilnadu Ophthalmic Association Vol. 53 Issue 4, Nov 2013.
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COMPLETED PROJECTS

- A Phase III, Randomized, Active Comparator-Controlled, Four- Week, Double-Masked Clinical Trial to Compare the Efficacy and Safety of Preservative-Free MK-2452 (0.0015%) and Preservative-Free Timolol Maleate (0.5%) in Patients with Open-Angle Glaucoma or Ocular Hypertension in India. [Dr. B. Shantha]
- Primary angle closure glaucoma (PACG) Genetics study [Dr. B. Shantha]
- Primary Open Angle Glaucoma (POAG) Genetics study [Dr. B. Shantha]
- A Pilot study on rapid detection of viable "Mycobacterium tuberculosis and multidrug resistant (MDR) tuberculosis from clinically suspected tuberculosis patients in Chennai – A Major Public Health Problem in India" [Dr. K.Lily Therese]
- A clinico molecular biological study on infectious mononucleosis caused by Epstein - Barr virus and to study the genotype prevalence in Chennai. [Dr. H. N. Madhavan]
- Role of Adiponectin on the integrity of Blood retinal barrier during Diabetic retinopathy using an in vitro 3D cell culture model. [Dr. J. Subbulakshmi]
- Design and development of small therapeutic peptide to target Angiogenesis by regulating Lysyl Oxidase [Dr. K. N. Sulochana]
- Development of siRNA by targeting copper regulators to control angiogenesis [Dr. K. N. Sulochana]
- Development of Therapeutic Peptides from small proteoglycan luecine rich repeat family for the inhibition of tumor angiogenesis (Dr. K N Sulochana)
- Characterization of Consanguineous LCA families a homozygosity based approach (Dr.N.Soumittra)
- Aptamer based radio pharmaceuticals for diagnostic imaging and targeted radiotherapy of epithelial cancers. [Dr. J. Biswas]
- Targeted radioiodine therapy using EpCAM promoter guided sodium iodide Symporter gene transfection in treating EpCAM positive cancers [Dr. S. Krishnakumar]
- Effect of antioxidant peptides in modulating the reactive oxygen species in retinoblastoma cell line through Nanoparticles [Dr. S. Krishnakumar]
- A Novel Tissue Engineering Approach for Bioengineering Corneal Epithelial Cells from Non-Ocular Epithelial Cells [Dr. S. Krishnakumar]
- Tissue specific cytoxicity mediated by Nano particle delivered suicidal Gene therapy [Dr. S. Krishnakumar]
- To investigate the expression of microRNAs with deregulated host genes accompanying RNAi of EpCAM in Retinoblastoma [Dr. S. Krishnakumar]



- To Understand the Role of MicroRNA in Drug Resistant Retinoblastoma [Dr. Vikas Khetan]
- ✤ National Retinoblastoma Registry (Dr. Vikas Khetan)



ONGOING PROJECTS

- Multicenter Phase II Study for International Intraocular Retinoblastoma Classification Groups B, C & D tumuors Treated with Carboplatin -Etoposide, Vincristine, and Cyclosporine - Focal Therapy Multimodality Protocol [Dr Vikas Khetan]
- Study to observe the effectiveness and safety of Lucentis through individualized patient treatment and Associated outcomes [Dr. Tarun Sharma]
- A Phase III, Multinational, Multicenter, Randomized, Double-Masked, Study Assessing the Safety and Efficacy of Intravitreal Injections of DE-109 (three doses) for the Treatment of active, Non-Infectious Uveitis of the Posterior Segment of the eye [Dr. J Biswas]
- An eye tracker perimeter intuitive tool for affordable glaucoma diagnosis and screening [Dr. Ronnie George]
- 1-Month Daily Wear Dispensing Clinical Evaluation Of Echo Prototypes EC.0.2, EC.1.2 and EC.2.2 in a population of New and Current Contact Lens Wearers [Dr. M. Rajeswari]
- Comparison of ocular response in daily wear hydrogel user shifted to Silicone hydrogel contact lenses and Neophytes fitted with Silicone hydrogel lenses [Ms. S Sheeba]
- Application of next generation sequencing technique to determine the whole Genome sequence of laboratory isolates of Pseudomonas aeruginosa (Both sensitive and resistant strains) and application of bioinformatics approach to identify the vulnerable area of drug targets in the genome [Dr. J. Malathi]
- An in vitro study on the pathogenic role of Hepatitis C virus and its inflammatory response using human corneal and conjunctival cell line and a clinico molecular micro biological study on HCV associated with keratoconjunctivitis sicca and Sjogren's syndrome [Dr. J. Malathi]
- To Train and Develop Infrastructure for Molecular Ophthalmic Pathology and Rapid Diagnosis of Ocular Infections in an Ophthalmic Institute in Assam [Dr. H. N. Madhavan]
- Molecular modeling and Docking, simulation studies of functional domains of *Toxoplasma gondii* RON4, RON2 & RON5 to understand the moving junction complex formation towards design of novel peptide and chemical inhibitors and validation through invitro studies [Dr. V Umashankar]
- Biomarker pattern discovery of graded changes in the opacity of human lens in age-onset cataract: a proteomic approach [Dr. Ananthkumar Badrinath]
- Identification of interacting partners for Pigment epithelium derived fetor (PEDF) in causing anti angiogenesis [Dr. K.N. Sulochana]



- Regulation of SNARE exocytotic machinery under physiological and pathological conditions of Diabetes [Dr. C. Subbulakshmi]
- Investigating the therapeutic potential of Lysyl Oxidase propeptide in angiogenesis and tumorogenesis [Dr. K. Coral Miriam]
- Analysis of Trace elements from donor eye balls with age related macular degeneration [Dr. K. Coral Miriam]
- Contact Lens wear induced changes in keratoconus patients at the level of Redox status, inflammatory cytokines and collagen cross linking [Dr. N. Angayarkanni]
- Screening of the Age related macular degeneration patients for PON polymorphism and its functional correlation at the level of the PON activity, OxLDL and Homocysteine in the blood [Dr. N.Angayarkanni]
- Understanding the effect of Adiponectin mediated signaling pathways on retinal degeneration using human retinal explant culture for designing efficient neuroprotective agent [Dr. C. Subbulakshmi]
- Development of modulators of ornithine decarboxylase (ODC) the therapeutic application in Retinoblastoma [Dr.K.N.Sulochana]
- Anti-Angiogenic Potential of the Plant Derived Polyphenols, Elagic, Galllic, Chebulagic and Chebilinic Acids : An invitro Study in Retinal Endothelial Cells [Dr. N. Angayarkanni]
- Development of Anti-Fibrotic agents for potential use in the Glaucoma filtration surgery to prevent scar formation in cultured Human scleral Chondrocytes and Tenons Fibroblast [Dr. Coral Miriam]
- Molecular cloning, sequencing, overexpression and characterization of a novel 88 kDa protein found in patients with Eales Disease, Uveitis, Tuberculosis, Leprosy and Rheumatoid Arthritis [Dr. K. N. Sulochana]
- A comprehensive analysis of microphthalmia and anophthalmia candidate genes in Indian population [Dr. S. Sripriya]
- Molecular Analysis of ocular developmental anamolies in Indian population [Dr S.Sripriya]
- Molecular Genetic Profile of Congenital Stationary Night Blindness in India using arrayed primer extension technology (APEX) and direct sequencing to associate with disease phenotype [Dr. Praveen sen]
- Fuch's endothelial corneal Dystrophy (FCD) Fine mapping and identifying candidate gene for the novel loci 20p12.1- q13.2 in early onset family and study the association of *TCF4* gene in sporadic late onset FCD cases in our population [Dr. N. Soumittra]
- Mutation Characterization Of Genes Frequently Implicated In BBS Patients From India [Dr. S. Sripriya]



- Molecular Diagnostics of LCA A Chip based re-sequencing approach [Dr. N. Soumittra]
- Aptamer-toxin conjugates for imaging and dual targeting of (cancer stem cells) tumor cells. [Dr. J. Narayanan]
- Locked nucleic acid modified aptamer-siRNA Chimeric conjugates for improved chemosensitivity and eradication of cancer stem cells [Dr. S. Krishnakumar]
- Fabrication of PDMS platform/Micro fluidics based PCR for the detection of oncogenic miRNAs in retinoblastoma patients serum [Dr. J. Narayanan]
- To Engineer a Aptamer-siRNA chimeric conjugates for targeting epithelial cancers [Dr. Sailaja Elchuri]
- Fabrication of MDm2 peptide conjugated Gold Nanoparticles for targeted therapy of Retinoblastoma [Dr. S. Krishnakumar]
- To Bioengineer self-assembled collagen fibres for corneal tissue engineering [Dr. S. Krishnakumar]
- To investigate the effect of fatty acid synthase(FASN) siRNA in a FASN expressing cancer cell line [Dr. S Krishnakumar]
- MiRNA in Retinoblastoma progression, biomarkers and novel AptamermiRNA therapeutics [Dr. S. Krishnakumar]
- To investigate the role of tumor microenvironment in RB progression [Dr. S. Krishnakumar]
- Identification of potential molecular inhibitors of all catalytic domains of fatty acid synthase (FASN) at the enzyme activity and gene expression level [Dr. S Krishnakumar]
- To investigate the cross-talk between oxidative stress and cellular methylation processes and dissect the functional role of epigenetically silenced genes in RB [Dr. J. Biswas]
- Proteomics and phosphoproteomics by mass spectrometry and flow cytometry in Retinoblastoma [Dr. Sailaja Elchuri]
- Proteomics based Identification and Validation of urinary Biomarkers for Age-related Macular Degeneration and development of sensor [Dr. J. Biswas]
- Developing tools for dynamical modeling of C.elegans neuronal network activity [Dr. Nivedita Chatterjee]
- Use of Aptamers to increase the efficacy of HMGA2 targeted therapy in Retinoblastoma [Dr. S. Krishnakumar]
- To validate a panel of differentially expressed miRNAs from RB serum profile and correlate clinicopathologically [Dr. S. Krishnakumar]



- Construction of Shack Hartmann Aberrometer with Adaptive Optics system for the measurement and correction of Human Ocular Aberrations [Dr. Prema Padmanabhan]
- Characterization and Correction of Foveal and Parafoveal Aberrations in Human eye using adaptive Optics [Dr. R .Krishana Kumar]
- Retrospective Studies from contact lens department [Dr.Rajeswari] :
 - Prescribing trends of Silicone Hydrogel contact lenses in a hospital based contact lens practice
 - Profile of contact lens wearers: 5 year retrospective study
 - Profile of pediatric contact lens wearers
 - Comparison of 2 fitting methods for special design GP lenses in keratoconus
 - Prescribing pattern of prosthetic tinted soft contact lenses



PARTICIPATION IN THE CONFERENCE

- Dr K N Sulochana participated in the CME programme held at ITC Grand Chola, Chennai on 6th April 2013 and gave a lecture on "The Science of Knowing shapes the art of living".
- Dr Biswas J attended the Pondicherry Ophthalmic Association Meeting at Arvind Eye Hospital Pondicherry, on 06th April 2013 and made presentations on "Ocular pathology for the DNB students" and "Uveitis search for the cause" and conducted an interesting quiz "Kaun Banega Uveapathy?".
- Dr Tarun Sharma attended the Vidarbha Ophthalmic Society Conference at Nagpur, on 6th & 7th April 2013 and made presentations on "Autofluroescens Mystery Macula" and "Macular hole".
- Dr. J Biswas attended the Asia Pacific Intraocular Inflammation Meeting at Taiwan from 12th to 14th April 2013 and made a presentation on "Evidence of tubercle by smear and culture in tubercular uveitis: Is it ever possible?".
- Dr Pramod Bhende and Dr Muna Bhende attended the "Ophthalmological Society Conference", from 12th to 14th April 2013, at New Delhi. Dr. Pramod Bhende gave presentations on "Retinopathy of prematurity surgery: Indications and outcomes" and "MIVS Instrument updates and principles of tissue dissection with newer machines" and Dr Muna Bhende gave presentations on "Judicious use of imaging in AMD & PCV" & "Suprachorodial Hemorrhage: Diagnosis & Management"
- Dr. S. S. Badrinath, Dr. Vasanthi Badrinath, Dr. Tarun Sharma, Dr. S Bhaskaran & Mr. Sugal Chand Jain met the Lok Sabha Speaker, Mrs. Meira Kumar on 25th April 2014 and attended the Parliamentary Forum on Population and Public Health Meeting at New Delhi. Dr. Badrinath gave a presentation on "The role played by Sankara Nethralaya - Combating Blindness in India" during the meeting.
- Dr. V. Umashankar attended a workshop at Tamil Nadu Veterinary and Animal Sciences University - Madhavaram on 08th May 2013 and delivered a talk on "Bioinformatics & Open source tools at the National Level Bioinformatics."
- Dr Biswas J, Dr Ekta Rishi and Dr Ronnie Jacob George attended the ARVO Conference at Washington, USA, on 12th May 2013. Dr Biswas made a presentation on "PCR in tuberculosis choroiditis and Eales' disease", Dr Ekta Rishi made a poster on "Culture & reverse transcriptase PCR proven tuberculous endophthalmitis – First report from a Tertiary Eye Centre" and Dr Ronnie Jacob George made a poster on "Van herick test in incident PACD"



- Dr Sulochana K N, Dr Angayarkanni N and Dr Gayathri attended the ARVO Conference at Washington, USA on 12th May 2013. Dr Sulochana made a poster presentation on "Can adiponectin be a therapeutic target for proliferative diabetic retinopathy?", Dr Angayarkanni N made a poster on "Tear specific potential protein biomarker identification by 2D-DIGE based proteomics in Dry eye syndrome associated with Rheumatoid Arthritis" and Dr Gayathri made a poster on "Rare & newer Non sporulating moulds emerging as cornea pathogens indentified by molecular techniques in a tertiary eye care centre".
- Dr Biswas J attended the CME programme at Allahabad on 25th May 2013 and made presentations on "Uveitis: Search for the cause", "Recent management of uveitis" and "Algorithm of diagnosis & management of choroiditis" and "Vasculitis"
- Dr. K. Lily Therese participated in the Post Graduate Institute of Basic Medical Sciences, University of Madras, (PGIBMS) at Taramani on 11th June 2013, and delivered a lecture on "Application of Molecular technique in Ocular infections".
- Dr. L. Vijaya attended the Glaucoma Convene 2013 Conference at Ahmadabad on 16th June 2013 and gave lectures on "Natural history of angle closure disease and shift in treatment protocols", "Approach to different scenarios in glaucoma management" and "Cataract and glaucoma – glaucoma specialist perspective".
- WHONET Training Program organized by "WHO SEARO" office was conducted from 17th to 21st June 2013 at Vision Research Foundation. 22 Microbiologists participated from South East Asian countries in this training program.
- Dr. S. Krishnakumar attended the Sydney International Nanomedicine Conference at Sydney, Australia from 29th June to 5th July, 2013.
- Dr Prema Padmanabhan attended the Indian Intraocular Implant & Refractive Society Meeting, Chennai, on 6th & 7th July 2013 and gave presentations on "Glued IOL & sticky situation" and "Co-existent keratoconus with Fuchs endothelial dystrophy – Clinical challenges".
- Dr. L. Vijaya, Dr. T S Surendran, Dr Biswas J, Dr Pramod Bhende and Dr Muna Bhende attended the 61st Annual Conference of the Tamil Nadu Ophthalmic Association (TNOA) at ITC Grand Chola, Chennai from 9th to 11th July 2013. Dr Vijaya co-chaired case discussions. Dr. T S Surendran made a presentation on "preventive measures followed at SN in OT to prevent infection", Dr Biswas J made presentations on "Masquerade Syndromes", "Choroidal Nodules in ophthalmic panorama", "Challenging cases in Uvea & Quiz" and "Peer reviewed publications my personal experience".



Dr Pramod Bhende gave a presentation on "MIVS update and principle of tissue dissection with newer machines", and Dr Muna Bhende made presentations on "Vitrectomy for eyes with viral retinitis", and "Newer imaging modalities in macular disorders".

- Dr Prema Padmanabhan, Dr B Shantha, Dr Ronnie Jacob George, attended the 61st Annual Conference of the Tamil Nadu Ophthalmic Association (TNOA) at ITC Grand Chola, Chennai from 9th to 11th July 2013. Dr Prema Padmanabhan made a paper presentation on "Regrafts", Dr B Shantha made a presentation on "Beyond IOP control – neuro & vasoprotections", Dr Ronnie Jacob George made a presentation on "Unraveling angle mysteries – imaging of anterior segment".
- Dr Pukhraj Rishi, Dr Ekta Rishi, Dr Manish Panday and Dr Suganeshwari G attended the 61st Annual Conference of the Tamil Nadu Ophthalmic Association (TNOA) at ITC Grand Chola, Chennai from 9th to 11th July 2013. Dr Pukhraj Rishi made a presentation on "Management of choroidal melanomas"; Dr. Ekta Rishi on "VR surgery in K- pro eyes"; Dr Manish Panday on "Target Intraocular pressure" & "Visual fields in glaucoma" and Dr Suganeshwari made a presentation on "OCT Management of Vascular Tumors".
- Dr Sumitha Agarkar, Dr Krishnakumar S, Dr R R Sudhir, Dr Bhaskar Srinivasan, Dr Pradeep S, Dr Shweta Agarwal, Dr S Sudharsan and Dr Ambika S, attended the 61st Annual conference of the Tamil Nadu Ophthalmic Association (TNOA) Conference at ITC Grand Chola, Chennai from 9th to 11th July 2013. Dr Sumitha Agarkar made a presentation on "Surgical intervention in Pediatric cataract"; Dr Krishnakumar S made a presentation on "Nanotechnology of Ophthalmology", Dr R R Sudhir made a presentation on "EMR and paperless office", Dr Bhaskar Srinivasan made poster presentations on "Cornea OSD" & "Ocular surface reconstruction". Dr Pradeep S gave a talk on "Chromovitrectomy"; Dr Shweta Agarwal made a paper presentation on "Boston Type 1 Kpro: The Sankara Nethralaya experience over 5 years", Dr Sudharsan made a presentation on "An aid to diagnose ocular AIDS" and Dr Ambika S made a presentation on "Interpretation of visual field in optic head pathology"
- Dr. L. Vijaya attended the Asian Angle-Closure Glaucoma Club (AACGC) conference, at Singapore on 10th to 11th July 2013 and gave a talk on "Recent findings in ACG genetics-what it means to clinician"
- Dr Prema Padmanabhan attended the Refractive Surgery 360degree conferences at Hyderabad, on 17th& 18th July 2013 and made presentations on "Making sense of Ocular aberration" and "Understanding Collagen Cross linking"



- ◆ Dr. L. Vijaya, Dr. B. Shantha, Dr. Ronnie George, attended the World Glaucoma Association Conference at Vancouver, Canada, from 17th to 20th July 2013. Dr. L. Vijaya gave presentations on "Glaucoma Society of India symposium - How to improve the detection rates for glaucoma" and "Symposium – Glaucoma Surgery Complications & Rescue operations Aqueous Misdirection, Blebitis, Endophthalmitis & Hemorrhagic Choroidals". Dr. B. Shantha, made a poster presentation on "Outcomes of Ahmed Glaucoma valve implantation in the management of pediatric glaucoma" and Dr. Ronnie George gave lectures on "Incidence of glaucoma in India" and "Angle closure in the developing world: What does the future hold?"
- Dr Tarun Sharma and Dr Sumita Agarkar participated in the American Association for Pediatric Ophthalmology and Strabismus (AAPOS) and Singapore National Eye Centre (SNEC) conference held at Singapore, from 14th to 16th July 2013 and Dr Tarun Sharma gave a presentation on "Lens sparing vitrectomy for ROP" and Dr Sumita Agarkar made presentations on "Secondary IOL in children outcome" and "Conjunctival nevus Duane Syndrome".
- Dr. V. Umashankar attended the Seminar at Sathyabama University on 26th July 2013 and delivered an invited talk on "Bioinformatics".
- Dr. J Biswas attended the 2nd National Uveitis Conference at Kathmandu on 26th and 27th July 2013 and made presentations on "Anterior uveitis don't think so simple", "Algorithm of Choroiditis" and "Pediatrics uveitis always a challenge".
- Dr Pramod Bhende, Dr Muna Bhende, Dr Sumita Agarkar and Dr Geetha Krishnan Iyer, attended the Ophthalmologists Association Conference, at Mumbai between 2nd and 4th August, 2013. Dr Pramod Bhende made presentations on "Advances in Diabetic retinal detachment management" and "Management of chronic postoperative endophthalmitis" and Dr Muna Bhende made presentations on "B Scan of vitreous hemorrhage"; "When do I laser lattices & retinal breaks?" and "Work up for retinal arterial occlusions". Dr Sumita Agarkar made presentations on "Surgical management of nystagmus" and "Adjustable suture surgery in strabismus" and Dr Geetha Krishnan Iyer made presentations on "Keynote address in keratoprosthesis " and "Theme ocular surface"
- Sankara Nethralaya and Vision Research Foundation organized a high power Symposium on the use of Nano Technology in Clinical Care on 2nd & 3rd August 2013. Inaugurating the Clinical Nano Medicine symposium over video conferencing from the Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore and delivering the plenary lecture through video conferencing, distinguished Scientist, National Research Professor, Linus Pauling Research Professor & Honorary President, Prof. C.N.R. Rao



commended Sankara Nethralaya's research work, particularly on Nano technology as a pioneering effort.

- Dr. J. Narayanan and Dr. Srujana Chitipothu attended the "Indo-US Workshop on Biotechnology and Translational Medicine" at Amrita Institute of Medical Sciences and Research centre (AIMS), Kochi on 10th August, 2013
- Dr Bipasha Mukherjee attended the AOCMF Advance Seminar on Orbital Injuries & Reconstruction, at Hyderabad between 16th and 18th August 2013 and gave presentations on "Clinical facial photography", "Secondary nasolacrimal duct obstruction" and "Pediatric orbital fractures: special considerations".
- Dr Muna Bhende participated in the 7th Indian AMD & Retina Congress, at Bangalore on 17th August 2013 and gave a presentation on "AMD,DME,CRVO,BRVO & surgery for macular disorders"
- Dr. B. Mahalakshmi attended a seminar on "Autoimmune diseases and diagnosis: An update programme" organised by CPL Diagnostics at Bangalore on 30th & 31st August 2013.
- Dr. L. Vijaya participated in the CME Program on Ophthalmology at Meenakshi Academy of Higher Education and Research, on 2nd September 2013 and gave a talk on "Overview of glaucoma - for under undergraduates and other department faculty"
- Dr Pukhraj Rishi attended the Intraocular Implant & Refractive Society Annual Conference, at New Delhi, on 5th & 6thSeptember 2013 and made a presentation on "Role of vitreoretinal surgeon in management of eyes with keratoprosthesis"
- Dr Jagadeesh V and Dr Lakshmi Prasanna S attended the 2nd Ophthalmic Forum of Indian Society of Anesthesiologists Conference, at Cochin on 14th and 15th September 2013. Dr. Jagadeesh gave a presentation on "Preoperative evaluation of patients posted for cataract surgery" and Dr. Lakshmi Prasanna made a presentation on "The Spot survey on controversial issues in Ophthalmic anesthesia using Voting Key pad"
- Dr. Biswas attended the 3rd Conjoint Ophthalmology Scientific Conference at Kuala Lumpur on 14th to 5th September 2013 and made presentations on "Clinicopathological and microbiological correlation in uveitis", "Ocular Tuberculosis", "Parasitic Uveitis" and "Role of Ozurdex in Uveitis".
- Dr Ronnie George & Dr Shantha B attended the Glaucoma Society of India Annual Meeting at Indore, from 19th to 21st September 2013 and Dr. Ronnie gave talks on "Gonioscopy: Abnormal & normal", "Visual fields in advanced glaucoma" and "Is Iridoplasty useful?", "Disc & field stable, imaging shows progression: treat."



Dr. B Shantha made presentations on "Optic nerve microcirculation" and "Glaucoma & on management of coexistent cataract and glaucoma".

- Dr Pramod Bhende attended the Advanced Vitreoretinal Techniques & Technology Meeting, at Kolkata, on 21st & 22nd September 2013 and he chaired a session in "Management of complicated RD"
- Dr. V. Umashankar attended the CME programme at MicroLabs, Coimbatore on 22nd September 2013 and delivered an invited talk on "Next Generation Sequencing".
- Dr. S R Bharathi and Dr. K Coral attended a Proteomics Workshop at Waters India Ltd, Bangalore, from 24th to 27th September 2013.
- Dr Biswas J attended the Uveitis Society of India Meeting at Mussoorie from 27th to 29th September 2013 and gave presentations on "Clinicopathological & microbiological correlations in uveitis" and "Clinical approach & classifications in uveitis".
- Dr Muna Bhende & Dr Suchitra Pradeep attended the Uveitis Society of India Meeting at Mussoorie from 27th to 29th September 2013. Dr Muna Bhende made a presentation on "Outcomes of surgery for RD due to viral retinitis" and Dr. Suchitra Pradeep on "Ultrasound biomicroscopy in Uveitis".
- Dr Pramod Bhende, & Dr Parveen Sen attended the 13th Euretina Retina Congress, at Germany, between 26th and 29th-September 2013. Dr Pramod Bhende gave a presentation on "Surgical management of intraocular parasite". and Dr Parveen Sen on "New information on medical & surgical retina as well as gene therapy of retinal disorders"
- Dr Shweta Agarwal, Dr Bipasha Mukherjee and Dr Pradeep S participated in the 7th Triennial Conference of Ocular Trauma Society Of India at Madurai on 28th and 29th September 2013. Dr Shweta Agarwal made a presentation on "Acute management & rehabilitation of chemical injuries". Dr Bipasha Mukherjee on "Orbital Fractures" and Dr Pradeep S gave a talk on "Trauma related dislocated lenses".
- Dr Pramod Bhende attended the National Retinopathy of Prematurity (ROP) Summit Conference at New Delhi, on 4th and 5th October 2013 and gave talk on "Sankara Nethralaya is one of the main centers in India involved in ROP management & training retina specialist for screening & treatment".
- Dr. K. Coral, Ms. Suganya and Mr. R. Naresh attended the Seminar on "The next generation of ION PGM technology" on 7th October 2013 at Hotel Park Sheraton, Chennai.



- Dr. V. Umashankar attended the CME programme at Aravind Eye Hospital, Madurai on 13th October 2013 and delivered an invited talk on "Introduction to Sequence Analysis and Biological Databases".
- Dr Muna Bhende participated the MOSCON & VOSCON Conferences from 25th to 27th October 2013, at Nagpur and she made presentations on "Imaging in trauma", "UBM for the VR surgeon", "Innovations in retinal therapeutics" and "Suprachoroidal hemorrhage diagnosis & management"
- Dr Pukhraj Rishi, Dr Rajesh P S and Dr Aditya Verma participated the International AMD Congress at Dublin, on 25th & 26th October 2013 and Dr Pukhraj Rishi gave a presentation on "Combination photodynamic therapy with Ranibizumab or Bevacizumab for treatment of wet ARMD"; Dr Rajesh made a poster on "A rare case report, Clinical evolution of acute polymorphous vitteliform maculopathy" and Dr Aditya Verma made a poster on "Malarial fever presenting unilateral proliferative retinopathy"
- Dr S S Badrinath participated in the Asia ARVO Conference at New Delhi from 28th to 31st October 2013 and gave a guest lecture on "Innovation of Ophthalmology".
- Dr. S. Krishnakumar, Dr. Nivedita Chatterjee, participated in the ASIA ARVO 2013 Conference at New Delhi from 28th to 31st October, 2013.
- Dr Parveen Sen and Dr Ronnie George attended the Asia ARVO, on 28-31 October 2013 at New Delhi and Dr Parveen Sen made a presentation on "Genotype & phenotype correlation in CSNB in Indian population" and Dr Ronnie George on "Sensitivity & specificity of the Von- Herick test in detecting angle closure glaucoma in prevalent and incident primary angle closure glaucoma".
- Dr Biswas J, Dr Bipasha Mukherjee and Dr Manish Panday, attended the Asia ARVO, on 28th to 31st October 2013 at New Delhi and Dr. Biswas made poster presentations on "Molecular diagnosis of ocular infections", "Peer reviewed publications – my personal experience" and "Polymerase chain reaction of intraocular tuberculosis", Dr Bipasha Mukherjee made a poster presentation on "Computer aided design and rapid manufacturing (CAD-CAM) in fabrication of ocular prosthesis" and Dr Manish Panday made a free paper presentation on "Age related decay of saccadic reaction time among normal in Eye Movement Perimetry".
- Dr. J. Subbulakshmi, Mr. Sivasankar S, Mr. Anand Babu K and Mr. Sanket D Charola, attended the Asia ARVO, on 28th to 31st October 2013 at New Delhi and Dr. J. Subbulakshmi made a poster presentation on "Adiponectin modulates the levels of tight junction and SNARE proteins in human primary retinal pigment epithelial cells", Mr. Anand Babu on "Paraoxonase expression in PBMC of AMD cases and in vitro studies on its alterations by



oxLDL". Mr. Sivasankar made a presentation on "Identification of phytochemicals targeting Epithelial to Mesenchymal transition in Retinal pigment epithelial cells" and Mr. Sanket made a paper presentation on ""Lysyl oxidase and its paralauges expression in corneal and keratoconus cornea".

- Dr.Soumittra, Ms. Vinita Kumari, Ms. N. N. Srikrupa and Ms. K Sudha attended the Asia ARVO, on 28th to 31st October 2013 at New Delhi. Dr. Soumitra made a paper presentation on "Homozygosity mapping in LCA in consanguineous south Indian families", Ms. Vinita Kumari made a poster presentation on "Genetic interaction between rs5498 IICAM-1), rs1061170 (CFH) & glycoslated hemoglobin levels among type 2 diabetic retinopathy patients from India". Ms. Srikrupa made a poster presentation on "Screening of LCA9 locus gene, NMNAT1, in LCA cases of Indian cohort, and Ms. Sudha made a paper presentation on "Candidate gene screening and array- based cytogenetic analysis of Microphthalmia/ Anophthalmia patients from Indian".
- Ms Revathy M, Ms Deepmala Mazumdar, Ms KP Mohana, Ms Rekha S, attended the Asia ARVO, on 28th to 31st October 2013 at New Delhi and Ms.Revathy made a poster presentation on "Visual Psychophysics, Physiological optics", Ms Deepmala Mazumdar on "Eye Movements and Neuro-ophthalmology", Ms Rekha S on "Visual Psychophysics, Physiological optics" and Ms KP Mohana made a paper presentation on "Multidisciplinary Ocular Imaging".
- Dr. K. Lily Therese and Mrs. L. Dhanurekha attended IAMM-National Conference from 22nd to 24th November 2013 at Hyderabad. They presented posters on "Optimisation and application of PCR based DNA sequencing targeting 'gidB gene' for the detection of mutations in Mycobacterium tuberculosis isolates in Chennai population" and "Optimisation and application of nested Reverse Transcriptase PCR targeting icl2 gene for the detection of viable Mycobacterium tuberculosis directly from sputum specimens".
- Mr. Saravanan attended the 5th Annual meeting of Proteomics Workshop from 27th to 30th November 2013 at Indian institute of Science, at Bangalore.
- Dr Pradeep S and Dr Suchitra Pradeep participated in the Karnataka Society of Ophthalmology Conference, at Karnataka from 7th to 9th November 2013 and made a presentation on "Endophthalmitis Vs TASS" and Dr Suchitra Pradeep gave a talk on "Update on recent investigations & treatment for uveitis"
- Dr Bipasha Mukherjee, Dr Sumita Agarkar and Dr Parthopratim Dutta Majumder attended the Ophthalmological Society Conference of West Bengal (OSWB), at Kolkata, from 21st to 23rd November 2013. Dr Bipasha



Mukherjee made presentations on "IC on WATERING" and "IC on TED"; Dr Sumita Agarkar gave lectures on "Keynote address in pediatric trauma" and "Diplopia management in thyroid eye disease" and Dr Parthopratim Dutta Majumder made a presentation on "Diagnosis & management of scleritis"

- Dr. Parveen Sen, Dr. Sulochana KN, Dr. Angayarkanni N, Dr. Umashakar V, Dr. Sripriya S, Dr. J Subbulakshmi, Dr. Coral K, Dr. Bharathidevi SR, Mr. Arun M, Mr. Bhuvanasundar R, Mr. Anandbabu K, and Mr. Nareshkumar RN, attended the 82nd Society of Biological Chemists (India) at University of Hyderabad, on 3rd December 2013.
- Dr. K Coral and Ms. Gomathy attended the "International Workshop on Wound Healing and Angiogenesis from 14th to 15th December 2013 at MIT Chennai.
- The research institution and the academic arm of Sankara Nethralaya organized an in-depth one day symposium titled "SN Genetics 2013 A Symposium on Gene Counseling and Gene Testing" at the Sri V.D. Swami Auditorium, Vision Research Foundation, Sankara Nethralaya on 21st December 2013. The day witnessed in-depth lectures by experts on the entire gamut of genetic study including genetic disorders, genetic counselling and prenatal diagnosis, role of latest technology in genetics and molecular diagnosis, research on the role of genes in diabetes mellitus and ocular disorders.
- Dr. L. Vijaya attended the 3rd Margazhi Ophthalmic Fest 2013 on 23rd December 2013 at Chennai, and she made a presentation on "2 problems 1 solution – Phaco with Trab"
- Dr. J Subbulakshmi participated in the Indian Society for Cell Biology Conference from 22nd to 24th December 2013 at Bangalore.
- Dr Prama Padmanabhan, Dr Rama Rajagopal and Dr Geetha Iyer Krishnan attended the 1st National Meeting of Corneal Surgeons of India at Goa, on 14th & 15th December 2013. Dr Prama Padmanabhan made presentations on "Collagen Cross linking – How, when & Why" and "Customization in laser refractive surgery"; Dr Rama Rajagopal on "Ocular surface neoplasia-clinical presentation, diagnosis & management options" and Dr Geetha Iyer Krishnan made presentations on "Performing surgery in patients with Dry Eye Disease", "Keratoprosthesis in India – an update", "Sterile melts after Type 7 Boston Kpro identification & management" and "Appropriate patient selection".
- Dr Tarun Sharma, Dr Suganeshwari and Dr Muna Bhende attended the Vitreoretinal Society of India: VRSI, on 12th –14th December 2013, at Pune and Dr Tarun Sharma made a presentation on "Recent advances & management of myopic CNVM", Dr Suganeshwari made a poster



presentation on "Intraocular infection masquerading as advanced Retinoblsatoma clinically and in MRI- Diagnostic challenge", and gave a Invited talk on "Current trends in management of uveal melanoma" and Dr Muna Bhende made a presentation on "Evidence based approach to management of RVO".

- Dr Muna Bhende participated in the CME Programme at Advanced Eye Hospital, at Navi Mumbai, on 1st December 2013 and gave a presentation on "Imaging in AMD & PCV, investigations and management of Hereditary retinal disorders"
- Dr Tarun Sharma and Dr Rajiv Raman attended the 17th Chhattisgarh State Ophthalmological Society Meeting at Raipur, on 14th December 2013. Dr Tarun Sharma made presentations on "Chief guest: Combining clinical acumen and research", "Myopic CNVM" and "Diabetic Macular Edema" and Dr Rajiv Raman gave presentations on "SN -DREAMS scientific contribution", "RVO update" and "OCT in macular degeneration"
- Mr. Muthukumaran S attended the at the Society of Biological Chemists (India) meeting 2013 held at University of Hyderabad from 2nd to 5th Dec-2013 and presented a poster entitled "Virtual Screening of small molecules and *In silico* designing of peptides targeting Histidine Decarboxyalse for anticancer activity".
- Dr. J. Narayanan and Dr. Sailaja Elchuri attended the Bangalore Nano Conference between 4th and 6th December 2013 at Bangalore.
- Dr. K N Sulochana, Dr. Angayarkanni and Dr. J Subbulakshmi attended the "DST – Lockheed Martin India Innovation Growth Programme 2014" at Trident Hotel, Chennai on 7th January 2014.
- Dr R. Selvi and Ms. Krithika attended a workshop about Mass spec and proteomics at the Institute of Bio Informatics (IOB) Bangalore from 6th to 11th January 2014. They also visited Dr. Amit Mondal at St. Johns Hospital and Dr Gopal Vaidyanathan at Waters India.
- Dr. K. Lily Therese attended the Institutional Bio Safety Committee Meeting at NIRT (National Institute for Research in Tuberculosis), at Chennai on 21st February 2014.
- Dr. J. Narayanan attended the International Workshop on Coating and Surfaces in Biomedical Engineering from 16th to 19th February, 2014 at IIT Madras.
- Dr. Sailaja Elchuri attended the Cancercon 2014 Conference at IIT Madras from 30th January to 2nd February, 2014.
- Dr. Nivedita Chatterjee attended the HIV Science Conference 2014 in YRG care, at Chennai from 30th January to 1st February, 2014.



- Ms. Karthiyayini attended the CME programme on "Environment Health and Safety" at Lister Metropolis, Chennai, on 1st February 2014.
- Dr. A J Pandian, Dr. Sripriya, Ms. Srilekha, Ms. Srikrupa, and Mr. Malaichamy participated in the Indo-UK Ophthalmic Genetics and Genetic counselling for Clinicians & Basic Scientists Conference and Workshop supported by Department Sciences Technology (DST), held at Bangalore from 15th to 16th February.
- Dr. A. J. Pandian participated in the 17th ADNAT Convention on 'Genomics in Personalized Medicine and Public Health' at Trivandrum between 23rd and 25th February 2014.
- Dr. N. Soumittra, Ms. Srilekha, Ms. Ferdina Marie Sharmila, Ms. C. Sathya Priya and Ms. D. Sudha attended the National Seminar on Functional Genomics at Dr.MGR University, Chennai, from 26th to 28th February 2014.
- Dr. Angarkannai gave an invited lecture on "Homocystiene in Retinal Diseases" at PGIBMS, (University of Madras) on 17th February 2014.
- Dr B Shantha, Dr Parthopratim Dutta Majumder, Dr Bhaskar Srinivasan, Dr Jaydeep Avinash Walinjkar and Dr Suchitra Pradeep, attended the AIOS Conference, from 6th to 9th February 2014, at Agra. Dr. Shanatha made presentations on "Dynamic contour tonometry" and "Techniques of IOP measurement in children", Dr Parthopratim Dutta Majumder presented an e-poster on "Diagnostic and therapeutic challenges in uveitis Posterior scleritis"; Dr Bhaskar Srinivasan made a presentation on "Mucous membrane graft and cultivated mucosal epithelial transplant"; Dr Jaydeep made a Video presentation on "Etiology & visual outcomes in patients with acute retinal necrosis".
- Dr Chetan Rao, Dr Amala Elizabeth George, Dr Sumita Agarkar, Dr Rupak Roy and Dr Kumar Saurabh attended the AIOS Conference, from 6th to 9th February 2014, at Agra. Dr Chetan Rao made presentations on "IC: advanced vitreoretinal techniques" and "Retinal detachment in viral retinitis"; Dr Amala Elizabeth George on "Uveitic cataracts in children"; Dr Sumita Agarkar on "Pediatric traumatic cataracts"; Dr Rupak Roy made presentations on "Posterior segment trauma: a case based approach" and "Surgical outcome in acute retinal necrosis" and Dr Kumar Saurabh made a paper presentation on "Choroidal detachment after scleral buckling surgery: treatment & prognosis" and a poster on "Structural & functional correlation in eyes with X linked retinoschisis".
- Dr Sudha K Ganesh attended the 12th International Ocular Inflammation Society Congress at Spain, on 27th February 2014 and gave a presentation on "Viral infections on posterior segment" and she was the moderator for



the topic "Current diagnostic approaches in infectious uveitis on behalf of uveitis society of India".

- Dr. Vijaya L attended the 7th International Congress on Glaucoma Surgery, ICGS, from 20th to 22nd February 2014, at Singapore and made presentations on "Controversies in glaucoma surgery Phaco versus PI for angle closure" and "Parallel Course, Retinal Disease and Glaucoma Posterior segment issues in glaucoma practice".
- Dr Ronnie George attended the Madras Council Ophthalmology of Association at Chennai on 23rd February 2014 and made a presentation on "Pitfalls of imaging".
- Dr. K Lily Therese, Dr.S. Krishnakumar & Dr.J. Narayanan attended the Indo- Australia Workshop at Deakin University, Australia from 10th to 15th March 2014 and Dr. Lily Therese delivered a lecture entitled "An Overview on Molecular Diagnostics in infectious diseases –Our experience in L & T Microbiology Research Centre".
- Dr. J. Malathi, Mr. N. Murugan, and Ms. Anisea L. J. Franklyne, participated in the Workshop on "Diagnostics and Translational Genome Sequencing in Clinical and Public Health Microbiology" conducted at Madras Medical Mission, at Chennai from 19th to 21st March 2014 and delivered a lecture entitled "Next generation sequencing on *Pseudomonas aeruginosa* in relationship to its drug resistance"
- Dr Ronnie George attended the Sri Lanka Glaucoma Interest Group Meet in Colombo, on 2nd March 2014 and gave a presenation on "Imaging in glaucoma Diagnosis what new in medical management"
- Dr Shantha B attended the Regional Ophthalmic Congress, at Kuala Lumpur, on 7th & 8th March 2014 and made a presentation on "Regional in decision making for surgical management of cataract & glaucoma".



DISTINGUISHED VISITORS

- Dr. Geetha Kadambi from US visited our foundation and interacted with scientists on 2nd April, 2013.
- Mr. AP Ganesh Ram, Chief Executive Officer from MARG Swarnabhoomi & Education Services visited our foundation on 06th April 2013.
- Professor Seeram Ramakrishna, Director, Center for Nanofibers and Nanotechnology, Singapore visited our foundation and interacted with HODs/Directors on 6th April, 2013.
- Mr. Yukitoshi Matsushita, President CEO, Mr. Tatsumori Kurachi Overseas Business Manager and Mr. Isao Mori, President from MIC Matsushita Industrial Co., Ltd. visited our foundation on 17th April 2013.
- Dr. R. R. Sinha and Dr. Dhananjay Tiwari from Department of Biotechnology (DBT), New Delhi visited our foundation and interacted with the scientists on 25th April, 2013.
- Mr. Charles Li and Mr. Saravanan Baskaran, Project Managers from Beijing Genome Institute (BGI), China, visited Genetics Lab on 29th April 2013.
- Dr. Mr. Karthikeyan, Retired Director of CBI with son Mr. Kailash visited pathology Lab on 6th May, 2013.
- Dr. Shanti Kumar Nair, Director, Amirta Institute for Nano Science Molecular Medicine, Prof. Samtanu Bhattacharya, Prof. & Chairman, Dept. of Organic Chemistry, IISc and Dr. Pradeep, Professor, IIT Madras visited the research laboratories on 18th May 2013.
- Dr. Sridhar Sivasubbu from CSIR Institute of Genomics and Integrative Biology (IGIB), New Delhi visited our foundation on 24th May 2013.
- Prof. Sanjay Kumar Verma, Dean, Academic Research Division, BITS Pilani visited our foundation on 27th May 2013 and gave a talk on "Bacterial Biosensors for detection of arsenic in Water".
- Prof. Muthulakshmi & Prof. Papathi, from Tamilnadu Dr.MGR Medical University visited foundation on 14th June 2013.
- Dr. Bjorn Pietzat, Nanosurf AG worked with NASA's Phoenix Mars mission to provide the atomic force microscopy module for the Mars probe, Switzerland visited our foundation on 19th June 2013 and gave talk on "Atomic Force Microscopy (AFM) system & its applications".
- Prof David Mellor, Associate Dean (International) & Prof Jagat Kanwar from Deakin University visited Nano biotechnology lab on 25th June, 2013 and interacted with Dr. S. Krishnakumar and the Deakin university students.
- Dr. S.V. Eswaran, Emeritus Scientist CSIR, St Stephen's College, Delhi visited our foundation on 28th June 2013 and gave a talk on "Cataract genesis & Scientific Wandering and Wondering".



- Mr. G. K. Tulsian, Executive President, Aditya Birla Grasim and his daughter visited our laboratories on 3rd July 2013.
- Dr Lisa Arbisser, University of Utah, Moran Eye Center, USA, visited our foundation on 06th July 2013 and gave a talk on "Refractive Cataract Surgery & Visual Rehabilitation".
- Mr. S. N. Prabhu Trustee & team from US visited our foundation on 16th July 2013.
- Mr. Aisingh Dhumal, Chief Manager, Technical Finance Group and Mr. Chandrakant, Manager, from ICICI Technical Investment Loan Division, Mumbai visited our foundation on 19th July 2013.
- Ms. Prabha, CEO & Managing Director, Petrostar Corporation visited our foundation on 20th July, 2013.
- Dr. Paolo Lanzetta, M.D from University of Udine, Department of Ophthalmology, Udine, Italy visited the Nano biotechnology lab on 27th July, 2013.
- Dr. Venkataraman Ramachandran, MD, Pediatric Transplant Surgeon from Missouri University visited our foundation on 31st July 2013.
- Dr. Anil Bharani M.D. D.M (AIIMS, New Delhi), Fellow-American College Cardiology, Prof.-Division of Cardiology from MGM Medical College M.Y. Hospital Indore visited the L & T Microbiology Research Centre on 3rd August 2013.
- Dr. Ramu Gundimeda from Institute of Bioinformatics (IOB) Bangalore visited the lens biology lab and discussed about the Mass spec on 5th August 2013.
- Mr. Subbu Apparsundaram, from Roche Pharmaceuticals, USA visited our research laboratories on 13th August 2013.
- Dr. Gopal, Indian Institute of Science, Bangalore visited the biochemistry lab and discussed about the ongoing project "Structure-function relationship on Lysyl oxidase" on 13th August 2013.
- Ms. Leni Chanduri from Narotam Sekhsaria Foundation (NSF) Mumbai visited our foundation on 19th August 2013.
- Dr. K. P. Misra, Director, Medical Education & Training, Apollo Hospital, Bhubaneswar, visited our foundation on 05th September 2013 and gave talk on "Art of teaching & Communication".
- Padmashri Prof. Manoj Das, Bilingual Writer Columnist, Editor, Professor, Philosopher, visited our foundation on 05th September 2013 and gave a talk on "Vision of Future in Indian Mythology".
- Mr. Raju Barwale, MD, Maharashtra Hybrid Seeds Company (Mahyco) visited to the Dept. Bio chemistry on 4th September 2013.



- Dr. Mohit Bansal Consultant, Vitreo Retina Services from Sadguru Netra Chikitsalaya Shri Sadguru Seva Sangh Trust, Jankikund, Chitrakoot Dist. visited our foundation on 10th September 2013.
- Dr William Joe Benjamin, Director, Eye Physiology & Ocular Prosthetics Laboratory, Senior Scientist of the University of Alabama's Vision Science Research Centre, USA visited our foundation on 19th September 2013 and gave a talk on "Optical Curiosities of Contact Lens".
- Dr Ashok Kumar Grover, Chairman, Dept of Ophthalmology, Sir Ganga Ram Hospital and Vision Eye Centres, New Delhi, visited our foundation on 27th September 2013 and gave a lecture on "General Principles of Oculoplastic Surgery".
- Prof Lingxue Kong, Deakin University visited the Nanobiotechnology lab on 14th October, 2013.
- Dr. S.G. Sivachidambaram, Prof. of Medicine, MMC, Chennai and Dr. Anuradha, Lecturer, Vasan Institute of Ophthalmology & Research visited our foundation for Inspection Continuance of Provisional Affiliation for Allied Health Science Courses by the Tamilnadu Dr. MGR Medical University on 12th November 2013.
- Dr. Krishna Sharma, Prof. of Ophthalmology, Director of Research, and University of Missouri-Columbia visited Pathology Lab on 14th November 2013.
- Dr. Rajeev Kumar Singh from PSGIAS, Coimbatore visited our foundation and visited research laboratories as a part of collaborative project from 22nd to 23rd November, 2013.
- Professor Tes Toop, Student Co-coordinator, Deakin University and Ms. Gayathri Vedhanayam visited our foundation and research laboratories and interacted with old and new PhD Deakin students on 3rd and 4th December, 2013.
- Nobel Laureate Dr. Walter Kohn from the University of California visited our foundation on 6th December 2013 and gave a lecture on "Characterization and Partial Correction of Macular Distortions".
- Mr. Garfield along with Dr. Shreeram from Bruker Scientific and Instrumental Company Pvt. Ltd visited Nano Biotechnology lab and gave a presentation about FTIR on 10th December, 2013.
- Prof. Ramanathan Iyer, M.D., Dr L H Hiranandani Hospital, Consultant-Sleep Medicine, Mumbai visited our foundation and gave a talk on "Sleep disorders and Eye" on 10th December 2013.
- Prof. Julie Kornfield (Co-inventor of Light Adjustable Lens) California, US visited our foundation on 11th December 2013 and gave a lecture on "New elastomers for optimal vision; The light adjustable intraocular lens".
- Dr. Farokh Udwadia visited our foundation on 13th December 2013 and gave a talk on "The forgotten art of healing".



- Nobel Laureate Dr Venkatraman Ramakrishnan, MRC Laboratory of Molecular Biology, Cambridge, England visited our foundation on 26th December 2013 and gave a lecture on "Ribosomes & Antibiotics".
- Dr. Char, Pathologist from University of West Indies visited Nano biotechnology lab on 7th January, 2014.
- Dr. Trichur Vidyasagar, Dr. Allison McKendrick, Dr. Andrew Anderson, Dr. Andrew Metha, Dr. Bang Bui from University of Melbourne visited our foundation on 9th January 2014.
- Mr. G Rangarajan, Mr. SP Arul from Indian Institute of Science visited our laboratories on 9th January 2014.
- Dr. Eranga Vithana from Singapore Eye Research Center (SERC) visited our research laboratories on 22nd January 2014.
- Dean W Felsher, Professor of Medicine (Oncology) & of Pathology, Stanford University School of Medicine, USA visited our foundation on 3rd February 2014 and gave a talk on "Modeling and Predicting Therapeutic success of cancer".
- Prof. Monte Del Monte Director Pediatric Ophthalmology, Mott Children's Hospital, Michigan visited our foundation on 03rd February 2014 and gave a talk on "Management of complex strabismus with adjustable sutures & surgical management of superior oblique palsy".
- Prof. Bindu Salim and Dr. Rajeev from the PSG Institute of Advanced Studies, Coimbatore, visited Nanobiotechnology lab on 4th & 5th February, 2014.
- Prof. RP Sundarraj, Dept of Management Studies, IIT Madras visited our foundation on 4th February 2014.
- Ms. Tawnya Wilson and Mr. Hong Guo from Johnson and Johnson, USA visited our foundation on 10th February, 2014.
- Dr David Mansfield, Inverclyde Royal Hospital Scotland, UK visited our foundation on 17th February 2014 and gave a talk on "Ocular side effect of systemic drug & Systemic side effect of ocular drug".
- Dr. Mallikarjuna, Chief Pathologist, Apollo Speciality Hospital visited the Pathology Lab on 19th February, 2014.
- Professor T.E.S Raghavan and his wife from University of Illinois at Chicago visited Nanobiotechnology lab on 25th February, 2014.
- Shri Swaminathan Ankuleswar Iyer, Journalist of New York Times, Washington, visited our research laboratories on 10th March 2014.
- Mr. Jaggu and Mrs. Shashi (Friends of Sankara Nethralaya) from Bangalore visited our foundation on 19th March 2014.
- The team from the Ministry of Foreign Affairs and Ministry of Defence, Oman, visited our foundation on 19th March, 2014.



- Dr. Vikrant Kumar, scientist from Genome Institute of Singapore (GIS) visited our foundation on 25th March 2014 and gave a lecture on "Next Generation sequencing and Eye diseases".
- Dr. A. B. S. Rajpoot, Mr.Yeshwant Saoji, Mr. Amod Gogate, Ms. Monica Choudhury, Mr. Nilesh Thite, from Shri Sadguru Seva Sangh Trust, Jankikund, Chitrakoot, Uttar Pradesh, visited the Research Laboratories on 26th March, 2014.