

The Members of the Vision Research Foundation

NOTICE

NOTICE IS HEREBY GIVEN TO THE MEMBERS OF VISION RESEARCH FOUNDATION THAT THE 32^{ND} ANNUAL GENERAL MEETING OF VISION RESEARCH FOUNDATION WILL BE HELD ON, SATURDAY, THE 24^{TH} SEPTEMBER 2016 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 2015-16.
- 2. To consider and adopt the Audited Income and Expenditure Account for the year ended March 31, 2016 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 2016–17 and to fix their remuneration.
- 4. To appoint the following Member to the Board of Management in the vacancy caused by their retirement, who is eligible for re-appointment.

Name

Category of Membership

Dr T S Surendran

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 member was appointed to the Board of Management for a period of three years at the 29^{th} Annual General Meeting held on 28^{th} September 2013 :-

Name

Dr T S Surendran

His term of appointment expires at the end of the Annual General Meeting on 24.09.2016. As per 16(xiv) of the Bye-laws of the Foundation read with Section 15 (5) of the Tamil Nadu Societies Registration Act 1975, he is eligible for reappointment to the Board of Management.



BOARD OF MANAGEMENT

Dr. Lingam GopalPresidentDr Tarun SharmaHonorary SecretaryMr. R S FalorHonorary Treasurer

Members of the Board

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

Administrative Committee

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

Chief Operating Officer Advisor Director – Research Deputy Director – Research Director - Administration Deputy General Manager Manager Dr. K. S. Vasan Dr. Rama Rajaram Dr. Ronnie Jacob George Dr. S Krishnakumar Mrs. Akila Ganesan Mrs. G Susila Mr. S Narayan

M/s S Viswanathan

Auditors

Bankers

Registered Office

HDFC Bank, Chennai – 600 034 State Bank of India, Chennai –600 034

Chartered Accountants, Chennai

Indian Overseas Bank, Chennai – 600 006

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. J Biswas Dr. R R Sudhir Dr. Vikas Khetan Dr. Kalpathy R K Easwaran Dr. Prema Padmanabhan Dr. N Angayarkanni



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 2015-16

Report of the Honorary Secretary to the Members of the Foundation

It gives me great pleasure to welcome you all to this 32nd Annual General Meeting of our Foundation. I am pleased to present the Thirty Second Annual report of Vision Research Foundation. The thirty first Annual General Meeting of the Foundation was held on 25th September 2015 in which the Annual Report and the Audited Accounts of the Foundation for the financial year ended 31st March 2015 were approved by the members and M/s. S Viswanathan LLP, Chartered Accountants, were re-appointed as Auditors for the financial year 2015-16.

The donations received during the year under report were Rs.563.25 lakhs as compared to Rs.791.64 lakhs in the previous year. The gross total income for the year under review was Rs.1164.17 lakhs including research grants and interest on deposits. The total expenditure before providing depreciation was Rs.795.01 lakhs resulting in a cash surplus of Rs.369.16 lakhs. After considering depreciation for the year, there was a net surplus of Rs.206.94 lakhs, which was carried over to the capital fund account.

Vision Research Foundation organized the 41st Indian Society of Human Genetics Annual Meeting & International Conference (ISHG 2016), at Sri Mutha Venkata Subba Rao Concert Hall, Harrington Road, Chennai, from 3rd to 5th March 2016. The conference was attended by nearly 400 delegates. Prof. Bainsbridge, Vitreo-retinal Surgeon from UK, Dr. Myles Axton, Chief Editor, Nature Genetics Journal, USA, Prof. Sowmya Swaminathan, Director General, Indian Council of Medical Research and other distinguished scientists from many National and International institutes participated/ attended in the conference.



Recent advances in human genomics, diagnosis and treatment of genetic diseases are some of the areas that were discussed in the conference.

Summary of Source and applications are as follows:

Sources		Rs. in Lakhs	
1.	Cash Surplus	369.16	
		369.16	
Applications of Funds			
1. 2.	Increase in Fixed Assets Increase in Net Current Assets	22.44 346.72	
		369.16	

The foundation has received a sum of Rs.478.59 lakhs as research grants during the year under review as per the details given below :

Rs. in Lakhs

Re	search Grants – Basic Science	2015-16	2014-15
1.	Council of Science & Industrial Research	18.39	29.18
2.	Indian Council of Medical Research	103.88	74.48
3.	Department of Biotechnology	164.59	204.69
4.	Department of Science & Technology	34.55	30.89
5.	Department of Atomic Energy	.00	0.65
6.	Life Sciences Research Board	.00	6.40
7.	National Programme on Micro & Smart		
	Systems	0.38	2.29
8.	Chect Foundation	10.61	11.21
9.	Chennai Willingdon Corporate Foundation	.00	22.83
10.	Fellowship Programme	31.58	.00
11.	Others	22.86	.00
	Total	386.84	382.62



Clinical Science

12.	Allergan Pharm. Dev. Center (I) P. Ltd	.00	0.21
13.	Alcon Laboratories Ltd	.05	.00
14.	Chiltern International Pvt. Ltd.	2.01	2.70
15.	Clinworld Pvt. Ltd.	4.41	0.30
16.	Excel Life Sciences Pvt. Ltd.	11.28	2.51
17.	Indiana University	7.03	0.12
18.	Johnson & Johnson	30.19	30.48
19.	Manipal Acunova Ltd.	.10	0.30
20.	Novartis India Ltd	34.53	11.32
21.	Quintiles Ltd	0.15	2.50
22.	University of Pennsylvania	.00	1.72
	Total	89.75	52.16
	Grand Total	476.59	434.78

Research Activities:

Research activities during the financial year were satisfying. A number of projects were submitted to the Department of Science and Technology and Department of Biotechnology.

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 2016-17 (Value in Rs.)
Self-assembling peptide nanofiber matrix as implants for fungal keratitis drug delivery system (P.I.: Dr. J Narayanan)	Dept. of Biotechnology	2,283,500
3D cancer tissue growth on grapheme sponges for cancer drug therapy (P.I.: Dr. Sailaja Elchuri)	Dept. of Science & Technology	1,266,000
Patient derived induced pluripotent stem cells (iPSCs) for modeling retinoblastoma tumorigenesis (P.I.: Dr. Sowmya Parameswaran)	Dept. of Biotechnology	2,433,864



During the year, four meetings of the Board of Management were held and Research & Ethics Sub-Committees met three times and Institutional Committee for Stem Cell Research conducted its first committee meeting in October 2015.

Manpower Details :-

Manpower	As on 31 st Mar 2016	As on <u>31st Mar 2015</u>
President	01	01
Directors	06	06
Advisor-Projects	01	01
Deputy Director	01	01
Head of the Department / Principal Scientist / Associate Professor	03	03
Manager	01	01
Chief Scientist / Senior Professor	01	00
Chief Scientist / Professor	01	00
Senior Principal Scientist / Associate Professor	03	00
Principal Scientist / Associate Professor	05	03
Senior Scientist II / Assistant Professor	02	04
Research Associate	02	00
Senior Research Fellows	23	17
Junior Research Fellows	05	05
Research / Project / Technical Asst	04	04
Scientists	00	01
Junior Scientists	07	10
Executives / Staff / Technicians	12	17
Professor	00	01
Bio-statistician	01	01
Part Time Scientists	98	90
Total	177	168



Conclusion:

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

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 LLP 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 2013.

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

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



HONOURS & AWARDS

- Ms. Moutushy Mitra was awarded the Ph.D degree at Sastra University, Thanjavur on 13th April 2015, for her thesis entitled, "To investigate the effect of Tiam (T Lymphoma invasion and metastasis suppressor) siRNA on tumor cell survival proliferation in retinoblastoma"
- Mr. K. Gopinath was awarded the Ph.D at Sastra University, Thanjavur on 20th March 2015 for the thesis entitled "Role of the endocannabinoid system in retinal Muller glial innate immunity".
- Ms. Jaisy Samuel, was awarded the Ph.D at Deakin University, Australia on 9th December 2014 for the thesis entitled "Targeting the sodium iodide symporter (NIS) and apoptotic genes in extrathyroidal tumors"
- Ms. Nithya Subramanian was awarded the Ph.D degree at Deakin University, Australia on 21st April 2015 for the thesis entitled, "Molecular Insights and ligonucleotide Based Targeted Gene Therapy against Cancer"
- Dr. K Padma Lakshmi won the "Divya Chaturvedi Gold Medal award" for her outstanding performance on the paper "Sub-speciality of Uveitis and Inflammatory Diseases", in the DNB examinations held in April 2015.
- Dr. L. Dhanurekha was awarded Ph.D degree at BITS Pilani on 16th May 2015 for the thesis entitled, Phenotypic and Genotypic methods for Rapid Detection and Drug (First and Second line) Resistance of Tuberculosis"
- Dr. Iyer Gomathy Narayanan was awarded the Ph.D degree at BITS Pilani 18th May 2015 for the thesis entitled, "Design & Development of small molecule inhibitors Targeting Copper Transporter1 in Copper Mediated Angiogenesis"
- Dr S S Badrinath was honored with an Award for completing Platinum Anniversary -75 years of service in the field of Ophthalmology, "Celebration Retina - Celebration Life 2015⁻ at a Conference held at the Sahara Star Mumbai and Aditya Jyot Eye Hospital in Mumbai between from 15th to 17th of May 2015.
- Dr. T. S. Surendran and Dr. Tarun Sharma gave a speech on blindness at a book release function held at Rashtrapati Bhavan. The President of India, Shri. Pranab Mukherjee released "Yogikasparsh" - a yoga manual in Braille written by Mrs. Nivedita Joshi.
- Ms. V. Nalini was awarded Ph.D degree at BITS Pilani on 26th June 2015 for the thesis entitled, "Experimental Evaluation of Molecular Targets for the Clinical management of Ocular Cancers (Retinoblastoma and Uveal Melanoma)".



- Dr S. S. Badrinath was presented a Gold Medal for his contribution to ophthalmology, by the Minister for Health and Family Welfare, Dr C Vijaya Baskar at the Annual Convention Inaugural Meeting of the Indian Intraocular Implant and Refractive Society, India (IIRSI) at ITC Grand Chola, Chennai on 4th July 2015.
- Ms S. Srilekha received the Travel Fellowship for attending the 22nd Annual Meeting of Indian Eye Research Group (IERG) ARVO Conference held at L.V.Prasad Eye Institute (LVPEI) Hyderabad from 25th to 26th July 2015.
- Dr Vathsalya Vijay received the "Best Paper Award" for "Combined Radiological and Surgical Intervention for Peri-orbital AV Malformation" at the Curbside Clinix CME held at Narayana Nethralaya, Bangalore, on 9th August 2015
- Dr. J Biswas was elected as the President of the Inflammation Society of India on 22nd August 2015 at the annual meeting held in ChanRe Rheumatology and Immunology Center and Research, Bangalore.
- The Terry Fox Foundation at IIT Madras conducted the "Terry Fox Run A Marathon of Hope" on 23rd August 2015 to raise funds for cancer research and Vision Research Foundation was chosen as the beneficiary of its assistance for the year 2015.
- Dr. J. Biswas received Prof. E. T. Selvam Oration Award at Regional Institute of Ophthalmology & Government Ophthalmic Hospital, Chennai on 23rd September 2015.
- Mr R. N. Naresh Kumar and Ms. Gayathree K attended the 3rd International Conference in Angiogenesis: Techniques and Therapeutics held at Sastra University, Thanjavur on 23rd and 24th September 2015. Ms. Gayathree received the Best Poster Award for "Hyperglycemia induces early growth response-1 (EGR1) in human diabetic retina mediating abnormal vascular changes in diabetic retinopathy" and Mr R. N. Naresh Kumar's paper entitled "Lysyl oxidase propeptide (LOX-PP) inhibits VEGF mediated angiogenesis by down-regulating FAK signalling" was selected for oral presentation under the Young scientist category and he received a shield.
- Ms. M. K. Janani & Ms. M. Vimalin Jayalatha participated in the IAMM Conference in Clinical Microbiology ARISE – 2015 held at SRM University, Chennai, on the 28th September 2015. Ms. Janani won the First Prize for poster presentation entitled "Novel Immune Regulatory Pathway Associated with Epstein Barr Virus (EBV) and the Recombinant EBV Protein Mediated Inflammation in Retinal Pigment" and Ms. M. Vimalin Jayalatha won the second Prize for poster presentation entitled "Response of Retinal Pigment Epithelial Cells towards Leptospiral recurrent Uveitis Antigens".



- Dr. Smitha Praveen received the highly prestigious 'Smt. Pushpa Rani Pattanayek Award' for excellence in community services for the year 2014-15 at the Annual Conference of the Association of Community Ophthalmologists of India (ACOIN) on 31st October 2015 at Lucknow.
- Mr. Ravikant Danda received the Travel Fellowship from Department of Biotechnology, Government of India and attended the 14th Human Proteome Organization World Congress HUPO Conference held at Vancouver, Canada from 27th September to 1st October 2015.
- Dr S S Badrinath was honoured with "Ambassador of Goodwill", by the International Association of Lions Clubs, for his dedicated service to society on the 8th November 2015 at the Taj Connemara Hotel, Chennai.
- Dr Lingam Gopal was honored with the Life Time Achievement Award, in Khoo Tek Puat Hospital of Singapore.
- Dr. Nivedita Chatterjee was awarded the Australia Award Fellowship 2015 by the Department of Foreign Affairs and Trade, Government of Australia. She availed the fellowship at the University of Melbourne, Melbourne, Australia at the Department of Optometry and Vision Sciences from 2nd October to 17th November, 2015.
- Mr. N. Murugan, received the "Best Poster in Bacteriology" for the poster entitled "Development and Application of Set of Multiplex PCR for rapid diagnosis of drug resistant genes among clinical isolates of Pseudomonas aeruginosa" presented (Oral Presentation) at the 39th National Conference of the IAMM held at JIPMER, Puducherry from 27th to 29th November 2015.
- Ms. A. R. Rajalakshmy received the Young Woman Scientist Award in memory of Smt. Sreerangamma N. Narayan and Smt. Radhamani N. Anantha for the year 2015 at the 27th Graduation Ceremony of Sankara Nethralaya held at Sri. V.D. Swami Auditorium, on 28th November 2015.
- Ms. Ferdina Marie Sharmila received the Ph.D degree for her thesis entitled "Gene Mapping of Ocular Quantitative Traits" on 28th November 2015 at BITS, Pilani.
- Ms. N. N. Srikrupa received Swarnalatha Punshi Best Researcher Award in Basic Science for the year 2015 at the 27th Graduation Ceremony of Sankara Nethralaya held at Sri V.D. Swami Auditorium on 28th November 2015.
- Dr. Rajeswari Mahadevan was honored the "Asia Pacific Regional President" of the International Association of Contact Lens Educators, an educational association dedicated to raising the standard of contact lens education and promoting the safe use of contact lenses worldwide.



- Ms. Jameel Rizwana H and Ms. Rashima A received the "Endeavour Executive Fellowship Merit Award 2016" from the Department of Education & Training, Australian Government.
- Dr. Sanjana Suresh Rao, PG Student, won the Dr. S. Kanthimathynathan Endowment Gold Medal Award for Neuro-Ophthalmology.
- Dr. A V Sai Jyothi received the Prof S Krishnamoorthy Rao Gold Medal for the year 2015, for the Best Outgoing PhD Student at the 27th Graduation ceremony of Sankara Nethralaya on 28th November2015.
- Dr. V. Umashankar received the Early Career Research Award grant under Young Scientist Scheme – 2015 from Science & Engineering Research Board, Department of Science & Technology, Govt. of India.
- Dr. V. Umashankar has been selected as Member, Board of Studies for Bioinformatics, University of Madras, for the year 2016.
- Ms. Vinita kumari was awarded Ph.D degree at BITS Pilani on 8th January 2016 for the thesis entitled, "Association Study, Analysis for Genetic and Environmental Interaction of Variants in Candidate Genes for Inflammation (ICAM-1, CFH) and Neuroprotection (PEDF, EPO) in Type 2 Diabetic Retinopathy Patients from South India"
- Ms. M.K. Janani was awarded Ph.D degree at BITS, Pilani on 11th January 2016 for the thesis entitled "A Clinico - Molecular Biological and Genotypic Study on Epstein - Barr virus in Chennai Population".
- Ms. C. Sathyapriya was awarded Ph.D degree at Sastra University, Thanjavur on 22nd January 2016 for the thesis entitled, "Homozygosity mapping based genetic analysis of autosomal recessive families affected by Bardet-Biedl syndrome in Indian population"
- Ms. A R Rajalakshmy, was awarded Ph.D degree at Sastra University, Thanjavur on 15th February 2016 for the thesis entitled, "Molecular Immunology of Ocular Manifestations and Neuroinvasion of Hepatitis C Virus: Immune Response Against Virus and Viral Antigens".
- Dr Pukraj Rishi received the Best Paper Award for the paper entitled "Intra-arterial chemotherapy in eyes with retinoblastoma" at the AIOS conference held at Kolkata from 24th to 28th February 2016.
- Dr T. S. Surendran was conferred the highly prestigious 'Fellowship of the Royal college of Surgeons' (FRCS), the world's highest professional qualification for Surgeons, by the Royal College of Surgeons of Edinburgh in March 2016.



- Ms. D. Sudha received the Best Paper Award for the presentation entitled, "Non secreted mutant retinoschisin localizes to the plasma membranes" in the ISHG 2016 conference held at Chennai between 3rd and 5th March, 2016.
- His Excellency Dr. K. Rosaiah, Governor of Tamil Nadu presented the "Mayan Award 2015" to Dr. T. S. Surendran, on 20th March 2016. This award was given for his dedicated services rendered to the society by Vista India, Publishers of Health and Fashion.
- Dr Pramod Bhende received the "Achievement Award" for managing the scientific programs of the 31st Asia Pacific of Academy of Ophthalmology Congress, Taipei, held from 24th to 27th March 2016.



RESEARCH PUBLICATIONS

PUBLISHED:

- R. Roy, D. Das, S. Kumar, and A. Mukherjee, "Postcataract surgery endophthalmitis caused by acinetobacter lwoffii.," *Middle East Afr. J. Ophthalmol.*, vol. 22, no. 2, pp. 253–4, 2015.
- Mukherjee, A. Desai, S. Krishnakumar, and J. Biswas, "A Giant Apocrine Hidrocystoma Presenting as Lacrimal Gland Mass.," Orbit, vol. 34, no. 6, pp. 342–4, 2015.
- S. Sivasankar, R. Lavanya, P. Brindha, and N. Angayarkanni, "Aqueous and alcoholic extracts of Triphala and their active compounds chebulagic acid and chebulinic acid prevented epithelial to mesenchymal transition in retinal pigment epithelial cells, by inhibiting SMAD-3 phosphorylation.," PLoS One, vol. 10, no. 3, p. e0120512, 2015.
- M. Bipasha and P. Devi, "Lipoid proteinosis: A rare entity," Indian J. Ophthalmol., vol. 63, no. 8, p. 680, 2015.
- M. Kazi, V. Sharma, S. Kumar, and P. Bhende, "Indications and outcomes of scleral buckle removal in a tertiary eye care center in South India," Oman J. Ophthalmol., vol. 8, no. 3, p. 171, 2015.
- S. John, M. Premila, M. Javed, G. Vikas, and A. Wagholikar, "A Pilot Study to Improve Access to Eye Care Services for Patients in Rural India by Implementing Community Ophthalmology through Innovative Telehealth Technology.," Stud. Health Technol. Inform., vol. 214, pp. 139–45, 2015.
- John, V. Umashankar, S. Krishnakumar, and P. R. Deepa, "Comparative Modeling and Molecular Dynamics Simulation of Substrate Binding in Human Fatty Acid Synthase: Enoyl Reductase and β-Ketoacyl Reductase Catalytic Domains.," Genomics Inform., vol. 13, no. 1, pp. 15–24,2015.
- G. Iyer, B. Srinivasan, E. Rishi, P. Rishi, S. Agarwal, and N. Subramanian, "Large lamellar corneoscleral grafts: tectonic role in initial management of severe ocular chemical injuries.," *Eur. J. Ophthalmol.*, vol. 26, no. 1, pp. 12–7, 2015.
- S. I. Shaikh, J. Biswas, and P. Rishi, "Nodular syphilitic scleritis masquerading as an ocular tumor.," J. Ophthalmic Inflamm. Infect., vol. 5, p. 8, 2015.
- Archayeeta Rakshit, Kalpa Negiloni, Sumita Agarkar, Jameel Rizwana H. "Improvement and Sustainability of Visual Functions with Action Videogame Play in an Adult with Amblyopia: A Case Report.," *Int. J. Heal. Sci. Res.*, vol. 5, no. 11, pp. 464–467, 2015.
- T. Das, R. Raman, K. Ramasamy, and P. K. Rani, "Telemedicine in diabetic retinopathy: current status and future directions.," *Middle East Afr. J. Ophthalmol.*, vol. 22, no. 2, pp. 174–8, 2015.
- Gondchawar, J. Biswas, S. Murali, and L. Eawaran, "A case of herpes simplex keratouveitis diagnosed by real time polymerase chain reaction," *Indian J. Ophthalmol.*, vol. 63, no. 11, p. 854, 2015.



- Bharathi Devi SR, Coral K, Sulochanan KN, and Angayarkanni N, "Free Amino Acids Glycine and Glutamic Acid Inhibit Angiogenesis Induced by AGE in Bovine Retinal Endothelial Cells," *J. Glycomics Lipidomics*, vol. 05, no. 02, 2015.
- S. Ganesh and A. Kaduskar, "Optic nerve head granuloma as a primary manifestation of ocular sarcoidosis - A tertiary uveitis clinic experience," *Oman J. Ophthalmol.*, vol. 8, no. 3, p. 157, 2015.
- M. K. Janani, J. Malathi, A. Appaswamy, N. R. Singha, and H. N. Madhavan, "A hospital based pilot study on Epstein-Barr virus in suspected infectious mononucleosis pediatric patients in India," J. Infect. Dev. Ctries., vol. 9, no. 10, pp. 1133–1138, Oct. 2015.
- S. Kalmodia, S. Vandhana, B. R. Tejaswini Rama, B. Jayashree, T. Sreenivasan Seethalakshmi, V. Umashankar, W. Yang, C. J. Barrow, S. Krishnakumar, and S. V Elchuri, "Bio-conjugation of antioxidant peptide on surface-modified gold nanoparticles: a novel approach to enhance the radical scavenging property in cancer cell.," Cancer Nanotechnol., vol. 7, p. 1.
- H. N. Madhavan, R. Bagyalakshmi, P. Aarthi, C. Ashok, A. Prakash, M. Sowmiya, B. Ninan, and M. Revathy, "A Study in Neonatal Sepsis Using Polymerase Chain Reaction-Based DNA Sequencing to Detect the Aetiological Agent in the Peripheral Blood of the Neonates with Sepsis," Int.J.Curr.Microbiol.App.Sci, vol. 4, no. 9, pp. 415–427, 2015.
- J. Malathi, M. Janani, N. Murugan, and M. Hn, "Draft Genome Sequence Of Human Herpes Virus-4 Vrf_Ebv_01, An Epstein Barr Virus Obtained From A Pediatric Post Transplant Lymphoproliferative Disorder (PtId) Patient," Int. J. Pharm. Pharm. Sci., vol. 7, no. 9, pp. 513–514, 2015.
- G. Mathur, D. Ratra, S. S. Bhuibhar, and R. Roy, "Clinical Outcomes of Retinal Detachment Surgery following Cytomegalovirus Retinitis in Patients on Highly Active Anti-retroviral Therapy for Acquired Immune Deficiency Syndrome.," Ocul. Immunol. Inflamm., vol. 23, no. 5, pp. 400–4, 2015.
- B. Mukherjee, "A Stitch in Time...," Ophthal. Plast. Reconstr. Surg., vol. 31, no. 6, pp. 492–494, 2015.
- N. Murugan, J. Malathi, V. Umashankar, and Madhavan HN, "First Complete Genome Sequence Of Ocular Isolate Carrying Blavim-2 Mediated Multi-Drug-Resistant(Mdr) Pseudomonas Aeruginosa Vrfpa04 From India And Two Draft Genome Sequence Of Ocular Isolates Pseudomonas Aeruginosa Vrfpa03 And Vrfpa05 Harboring Novel Bla," Int. J. Pharm. Pharm. Sci., vol. 7, no. 12, pp. 291–292, 2015.
- N. Murugan, J. Malathi, K. L. Therese, and H. N. Madhavan, "Antimicrobial Susceptibility And Prevalence Of Extended Spectrum Betalactamase (Esbl) And Metallo Betalactamase (Mbl) And Its Co-Existence Among Pseudomonas Aeruginosa Recovered From Ocular Infections," Int. J. Pharm. Pharm. Sci., vol. 7, no. 5, pp. 147–151, 2015.



- N. Murugan, J. Malathi, V. Umashankar, and H. N. Madhavan, "Draft genome sequence of blaVeb-1, blaoxa-10 producing multi-drug resistant (MDR) Pseudomonas aeruginosa strain VRFPA09 recovered from bloodstream infection.," Braz. J. Microbiol., vol. 46, no. 3, pp. 639–40, 2015.
- N. Murugan, J. Malathi, K. L. Therese, and H. N. Madhavan, "Evaluation Of A Method For Detection Of Both Metallo Betalactamase (Mbl) And Efflux Production Using Carbonyl Cyanide 3-Chlorophenylhydrazone (Cccp)±Combination Method Among Pseudomonas Aeruginosa Isolated From Clinical Specimens," Int. J. Pharm. Pharm. Sci., vol. 8, no. 8, pp. 185–189, 2015.
- S. Neriyanuri, R. Raman, P. Rishi, K. Govindasamy, V. Ramprasad, and T. Sharma, "Prenatal genetic diagnosis of retinoblastoma clinical correlates on follow-up," *Indian J. Ophthalmol.*, vol. 63, no. 9, p. 741, 2015.
- Rajalakshmy, J. Malathi, H. Madhavan, and J. Samuel, "Mebiolgel, a thermoreversible polymer as a scaffold for three dimensional culture of Huh7 cell line with improved hepatocyte differentiation marker expression and HCV replication," *Indian J. Med. Microbiol.*, vol. 33, no. 4, p. 554, 2015.
- R. Raman, K. Santhanam, L. Gella, B. Pal, and T. Sharma, "Morphological and functional outcomes following modified early treatment diabetic retinopathy study laser in diabetic macular edema," *Oman J. Ophthalmol.*, vol. 8, no. 2, p. 92, 2015.
- K. Saurabh, K. Sarkar, R. Roy, and P. Majumder, "Personal and practice profile of male and female ophthalmologists in India," *Indian J. Ophthalmol.*, vol. 63, no. 6, p. 482, 2015.
- T. Sharma, R. Raman, D. Damkondwar, and S. Neriyanuri, "Microperimetry biofeedback training in a patient with bilateral myopic macular degeneration with central scotoma," *Indian J. Ophthalmol.*, vol. 63, no. 6, p. 534, 2015.
- Sowmiya M, Malathi J, Swarnali S, Priya JP, Therese KL, Madhavan HN. A study on the characterization of Propionibacterium acnes isolated from ocular clinical specimens. Indian J Med Res. 2015 Oct; 142(4): 438-49. doi: 10.4103/0971-5916.169209.
- S. Sreenivasan and S. Krishnakumar, "Synergistic Effect of Curcumin in Combination with Anticancer Agents in Human Retinoblastoma Cancer Cell Lines.," *Curr. Eye Res.*, vol. 40, no. 11, pp. 1153–65, 2015.
- N. Subramanian, J. R. Kanwar, P. K. Athalya, N. Janakiraman, V. Khetan, R. K. Kanwar, S. Eluchuri, and S. Krishnakumar, "EpCAM aptamer mediated cancer cell specific delivery of EpCAM siRNA using polymeric nanocomplex.," J. Biomed. Sci., vol. 22, p. 4, 2015.
- M. S. Alam, N. Subramanian, K. Koka, and K. Subramanian, "Orbital angioleiomyoma: A rare orbital neoplasm.," Orbit, vol. 35, no. 2, pp. 113– 6, 2016.



- Thirumudi, U. Vetrivel, M. B, K. L. Therese, and H. N. Madhavan, "Insights on drug targeting of toxoplasma Gondii host invasion proteins: A review," vol. 8, no. 3, pp. 52–57, 2015.
- N. Venkatesan, P. R. Deepa, V. Khetan, and S. Krishnakumar, "Computational and in vitro Investigation of miRNA-Gene Regulations in Retinoblastoma Pathogenesis: miRNA Mimics Strategy.," *Bioinform. Biol. Insights*, vol. 9, pp. 89–101, 2015.
- Rajeswari Mahadevan, Rajni Rajan, Sheeba Swarna, And Prafulla Kuthe, "SiHy Prescribing Trends." Contact Lens Spectrum Article Date: 4/1/2015.
- Beta M, Krishnakumar S, Elchuri SV, Salim B, Narayanan J. "A comparative fluorescent beacon-based method for serum microRNA quantification. Anal Sci. 2015;31(3):231-5. doi: 10.2116/analsci.31.231.
- N. Subramanian, J. R. Kanwar, B. Akilandeswari, R. K. Kanwar, V. Khetan, and S. Krishnakumar, "Chimeric nucleolin aptamer with survivin DNAzyme for cancer cell targeted delivery.," *Chem. Commun. (Camb).*, vol. 51, no. 32, pp. 6940–3, Apr. 2015.
- Kaviarasan K, Jithu M, Arif Mulla M, Sharma T, Sivasankar S, Das UN, Angayarkanni N. "Low blood and vitreal BDNF, LXA4 and altered Th1/Th2 cytokine balance are potential risk factors for diabetic retinopathy". Metabolism. 2015 Sep;64(9):958-66. doi: 10.1016/j.metabol.2015.04.005. Epub 2015 May 1.
- M. K. Parthasarathy and M. Bhende, "Effect of ocular magnification on macular measurements made using spectral domain optical coherence tomography.," *Indian J. Ophthalmol.*, vol. 63, no. 5, pp. 427–31, May 2015.
- N. Singh, S. Krishnakumar, R. K. Kanwar, C. H. A. Cheung, and J. R. Kanwar, "Clinical aspects for survivin: a crucial molecule for targeting drug-resistant cancers.," *Drug Discov. Today*, vol. 20, no. 5, pp. 578–87, May 2015.
- V. V. Jaichandran, R. Raman, L. Gella, and T. Sharma, "Local Anesthetic Agents for Vitreoretinal Surgery," *Ophthalmology*, vol. 122, no. 5, pp. 1030–1033, May 2015.
- L. Gella, R. Raman, V. Kulothungan, S. S. S. Pal, S. Ganesan, T. Sharma R. Raman, S. S. S. Pal, G. Laxmi, and M. Gupta, et. al "Impairment of Colour Vision in Diabetes with No Retinopathy: Sankara Nethralaya Diabetic Retinopathy Epidemiology and Molecular Genetics Study (SNDREAMS- II, Report 3)," *PLoS One*, vol. 10, no. 6, p. e0129391, Jun. 2015.
- L. Vijaya, R. Asokan, M. Panday, N. S. Choudhari, S. Ve Ramesh, L. Velumuri, and R. George, "Six-Year Incidence and Baseline Risk Factors for Pseudoexfoliation in a South Indian Population," *Ophthalmology*, vol. 122, no. 6, pp. 1158–1164, Jun. 2015.



- D. Bhavsar, K. Subramanian, S. Sethuraman, and U. M. Krishnan, "Management of retinoblastoma: opportunities and challenges.," *Drug Deliv.*, pp. 1–9, Jul. 2015.
- Z. Li, R. R. Allingham, M. Nakano, L. Jia, Y. Chen, Y. Ikeda, B. Mani, L.-J. Chen, C. Kee, D. F. Garway-Heath, S. Sripriya, et.al, "A common variant near TGFBR3 is associated with primary open angle glaucoma.," Hum. Mol. Genet., vol. 24, no. 13, pp. 3880–92, Jul. 2015.
- S. Srilekha, T. Arokiasamy, N. N. Srikrupa, V. Umashankar, S. Meenakshi, P. Sen, S. Kapur, N. Soumittra, Y. Chinchore, A. Mitra, et.al, "Homozygosity Mapping in Leber Congenital Amaurosis and Autosomal Recessive Retinitis Pigmentosa in South Indian Families," *PLoS One*, vol. 10, no. 7, p. e0131679, Jul. 2015.
- L. Gella, R. Raman, S. S. Pal, S. Ganesan, and T. Sharma, "Fixation characteristics among subjects with diabetes: SN-DREAMS II, Report No. 5.," *Can. J. Ophthalmol.*, vol. 50, no. 4, pp. 302–9, Aug. 2015.
- L. Gella, R. Raman, S. S. Pal, S. Ganesan, and T. Sharma, "Incidence, Progression, and Associated Risk Factors of Posterior Vitreous Detachment in Type 2 Diabetes Mellitus: Sankara Nethralaya Diabetic Retinopathy Epidemiology and Molecular Genetic Study (SN-DREAMS II, Report No. 7).," Semin. Ophthalmol., pp. 1–7, Aug. 2015.
- Rishi, P. Rishi, B. Appukuttan, J. Walinjkar, J. Biswas, and T. Sharma, "Sympathetic ophthalmitis following vitreoretinal surgery: Does antecedent trauma make a difference?," Indian J. Ophthalmol., vol. 63, no. 9, pp. 692–8, Sep. 2015.
- K. Kaviarasan, M. Jithu, M. Arif Mulla, T. Sharma, S. Sivasankar, U. N. Das, and N. Angayarkanni, "Low blood and vitreal BDNF, LXA4 and altered Th1/Th2 cytokine balance are potential risk factors for diabetic retinopathy.," Metabolism., vol. 64, no. 9, pp. 958–66, Sep. 2015.
- N. G. Maremanda, K. Roy, R. K. Kanwar, V. Shyamsundar, V. Ramshankar, A. Krishnamurthy, S. Krishnakumar, and J. R. Kanwar, "Quick chip assay using locked nucleic acid modified epithelial cell adhesion molecule and nucleolin aptamers for the capture of circulating tumor cells.," Biomicrofluidics, vol. 9, no. 5, p. 054110, Sep. 2015.
- B. Mukherjee, J. Kadaskar, O. Priyadarshini, S. Krishnakumar, and J. Biswas, "Angiolymphoid Hyperplasia with Eosinophilia of the Orbit and Adnexa.," Ocul. Oncol. Pathol., vol. 2, no. 1, pp. 40–7, Sep. 2015.
- Lakshmipathy D1, Kulandai LT2, Ramasubban G1, Hajib Narahari Rao M1, Rathinam S3, Narasimhan M4. "Nested reverse transcriptase-polymerase chain reactions targeting the messenger RNA of icl2, hspx, and rRNAP1 genes to detect viable Mycobacterium tuberculosis directly from clinical specimens. Int J Mycobacteriol. 2015 Dec; 4(4): 312-7. doi: 10.1016/j.ijmyco.2015.09.005. Epub 2015 Oct 1.
- Aditya Verma, Jyotirmay Biswas, Dhanurekha Lakshmipathy, Lily Therese Kulandai Gayathri Ramasubban. "Detection of Mycobacterium tuberculosis with nested polymerase chain reaction analysis in enucleated eye ball in Eales' disease". Int Ophthalmol 2015 DOI 10.1007/s10792-015-0144-9.



- J. Samuel, N. Singh, J. R. Kanwar, S. Krishnakumar, and R. K. Kanwar, "Upregulation of sodium iodide symporter (NIS) protein expression by an innate immunity component: Promising potential for targeting radiosensitive retinoblastoma.," *Exp. Eye Res.*, vol. 139, pp. 108–14, Oct. 2015
- S. Palla, J. Biswas, and C. K. Nagesha, "Efficacy of Ozurdex implant in treatment of noninfectious intermediate uveitis.," Indian J. Ophthalmol., vol. 63, no. 10, pp. 767–70, Oct. 2015.
- Shrirao N, Mukherjee B, Krishnakumar S, Biswas J. Cholesterol granuloma: a case series & review of literature. Graefes Arch Clin Exp Ophthalmol. 2015 Oct 6.
- Gondchawar, J. Biswas, S. Murali, andL. M. P. Eawaran, "A case of herpes simplex keratouveitis diagnosed by real time polymerase chain reaction.," Indian J. Ophthalmol., vol. 63, no. 11, pp. 854–5, Nov. 2015.
- M. K. Janani, J. Malathi, M. Rela, M. Farouk, J. Padmapriya, and H. N. Madhavan, "Genotypic Detection of Epstein Barr Virus in Pediatric Transplant Recipients From India.," Indian Pediatr., vol. 52, no. 11, pp. 946–50, Nov. 2015.
- M. Sangeetha, P. R. Deepa, P. Rishi, V. Khetan, and S. Krishnakumar, "Global gene deregulations in FASN silenced retinoblastoma cancer cells: molecular and clinico-pathological correlations.," *J. Cell. Biochem.*, vol. 116, no. 11, pp. 2676–94, Nov. 2015.
- Pandey, S. Balekudaru, R. George, V. Lingam, and M. Panday, "Surgical Management of Glaucoma in Sturge-Weber Syndrome." Glaucoma: Open Access Received date: September 15, 2015; Accepted date: October 31, 2015; Published date: November 10, 2015
- H. Sharma, S. Sudharshan, L. Therese, M. Agarwal, and J. Biswas, "Candida albicans scleral abscess in a HIV-positive patient and its successful resolution with antifungal therapy-a first case report.," J. Ophthalmic Inflamm. Infect., vol. 6, no. 1, p. 24, Dec. 2015.
- S. Ambika, M. Balasubramanian, L. Theresa, A. Veeraputhiran, and D. Arjundas, "Aquaporin 4 antibody [NMO Ab] status in patients with severe optic neuritis in India.," *Int. Ophthalmol.*, vol. 35, no. 6, pp. 801–6, Dec. 2015.
- D. Lakshmipathy, L. T. Kulandai, G. Ramasubban, M. Hajib Narahari Rao, S. Rathinam, and M. Narasimhan, "Nested reverse transcriptasepolymerase chain reactions targeting the messenger RNA of icl2, hspx, and rRNAP1 genes to detect viable Mycobacterium tuberculosis directly from clinical specimens.," Int. J. mycobacteriology, vol. 4, no. 4, pp. 312– 7, Dec. 2015.
- B. Mukherjee, O. Priyadarshini, S. Ramasubramanian, and S. Agarkar, "latrogenic Injury to Medial Rectus After Endoscopic Sinus Surgery.," Indian J. Otolaryngol. Head Neck Surg., vol. 67, no. 4, pp. 394–402, Dec. 2015.



- Murugan N, Malathi J, Umashankar V, Madhavan HN. "Resistome and pathogenomics of multidrug resistant (MDR) Pseudomonas aeruginosa VRFPA03, VRFPA05 recovered from alkaline chemical keratitis and postoperative endophthalmitis patient". Gene. 2016 Mar 1;578(1):105-11. doi: 10.1016/j.gene.2015.12.022. Epub 2015 Dec 10.
- J. J. González-López, A. Lavric, P. Dutta Majumder, N. Bansal, J. Biswas, C. Pavesio, and R. Agrawal, "Bilateral Posterior Scleritis: Analysis of 18 Cases from a Large Cohort of Posterior Scleritis.," Ocul. Immunol. Inflamm., vol. 24, no. 1, pp. 16–23, 2016.
- Lavric, J. J. Gonzalez-Lopez, P. D. Majumder, N. Bansal, J. Biswas, C. Pavesio, and R. Agrawal, "Posterior Scleritis: Analysis of Epidemiology, Clinical Factors, and Risk of Recurrence in a Cohort of 114 Patients.," Ocul. Immunol. Inflamm., vol. 24, no. 1, pp. 6–15, 2016.
- G. Narayanan, R. Saravanan, M. Bharathselvi, J. Biswas, and K. N. Sulochana, "Localization of Human Copper Transporter 1 in the Eye and its Role in Eales Disease.," Ocul. Immunol. Inflamm., pp. 1–6, Jan. 2016.
- Kanwar JR, Kamalapuram SK, Krishnakumar S, Kanwar RK. Multimodal iron oxide (Fe(3)O(4))- " saturated lactoferrin nanocapsules as nanotheranostics for real-time imaging and breast cancer therapy of claudin-low, triple-negative" (ER(-)/PR(-)/HER2(-)). Nanomedicine (Lond). 2016 Jan 20.
- Kalmodia S, Vandhana S, Tejaswini Rama BR, Jayashree B, Sreenivasan Seethalakshmi T, Umashankar V, Yang W, Barrow CJ, Krishnakumar S, Elchuri SV.'Bio-conjugation of antioxidant peptide on surface-modified gold nanoparticles: a novel approach to enhance the radical scavenging property in cancer cell'. Cancer Nanotechnol. 2016;7:1. Epub 2016 Feb 9.
- N. Shrirao, B. Mukherjee, S. Krishnakumar, and J. Biswas, "Cholesterol granuloma: a case series & amp; review of literature.," Graefe's Arch. Clin. Exp. Ophthalmol. Albr. von Graefes Arch. für Klin. und Exp. Ophthalmol., vol. 254, no. 1, pp. 185–8, Jan. 2016.
- E. Rishi, M. V Govindarajan, J. Biswas, M. Agarwal, S. Sudharshan, and P. Rishi, "Syphilitic uveitis as the presenting feature of HIV.," Indian J. Ophthalmol., vol. 64, no. 2, pp. 149–50, Feb. 2016.
- N. Venkatesan, J. Kanwar, P. R. Deepa, V. Khetan, T. M. Crowley, R. Raguraman, G. Sugneswari, P. Rishi, V. Natarajan, J. Biswas, and S. Krishnakumar, "Clinico-Pathological Association of Delineated miRNAs in Uveal Melanoma with Monosomy 3/Disomy 3 Chromosomal Aberrations.," PLoS One, vol. 11, no. 1, p. e0146128, 2016.
- V. Gopakumar, Nivedita Chatterjee, Sowmya Parameswaran, Subramanian Nirmala, Subramanian Krishnakumar, "In vitro transdifferentiation of human skin keratinocytes to corneal epithelial cells" Cytotherapy, 2016; 18: 673–685



- T. Das, A. Aurora, J. Chhablani, A. Giridhar, A. Kumar, R. Raman, M. Nagpal, R. Narayanan, S. Natarajan, K. Ramasamay, M. Tyagi, and L. Verma, "Evidence-based review of diabetic macular edema management: Consensus statement on Indian treatment guidelines," *Indian J. Ophthalmol.*, vol. 64, no. 1, p. 14, 2016.
- L. Gella, R. Raman, and T. Sharma, "Quantitative spectral domain optical coherence tomography thickness parameters in type II diabetes," *Oman J. Ophthalmol.*, vol. 9, no. 1, p. 32, 2016.
- P. Patil-Chhablani, S. Murthy, and M. Swaminathan, "Ophthalmic profile and systemic features of pediatric facial nerve palsy," *J. Eye Sci.*, vol. 1, no. 1, 2016.
- R. Raman, L. Gella, S. Srinivasan, and T. Sharma, "Diabetic retinopathy: An epidemic at home and around the world," *Indian J. Ophthalmol.*, vol. 64, no. 1, p. 69, 2016.
- Bindu Salim, Swapna Merlin David, Madhu Beta, Janakiraman Narayanan, Subramanian Krishnakumar and Thalakkotur Lazar Mathew "PMMA Platform Based Micro Fluidic Mixer for the Detection of MicroRNA- 18a from Retinoblastoma Serum", Journal of Analytical & Bio-analytical Techniques, 2015, Vol: 6, Issue 4, 1000258.
- N. Subramanian, B. Akilandeswari, A. Bhutra, M. Alameen, U. Vetrivel, V. Khetan, R. K. Kanwar, J. R. Kanwar, S. Krishnakumar, et. al "Targeting CD44, ABCG2 and CD133 markers using aptamers: in silico analysis of CD133 extracellular domain 2 and its aptamer," *RSC Adv.*, vol. 6, no. 38, pp. 32115–32123, 2016.
- N. Shrirao, B. Mukherjee, S. Krishnakumar, and J. Biswas, "Cholesterol granuloma: a case series & amp; review of literature.," *Graefe's Arch. Clin. Exp. Ophthalmol. Albr. von Graefes Arch. für Klin. und Exp. Ophthalmol.*, vol. 254, no. 1, pp. 185–8, Jan. 2016.
- G. Narayanan, R. Saravanan, M. Bharathselvi, J. Biswas, and K. N. Sulochana, "Localization of Human Copper Transporter 1 in the Eye and its Role in Eales Disease," *Ocul. Immunol. Inflamm.*, pp. 1–6, Jan. 2016.
- P. K. Athyala, J. R. Kanwar, M. Alameen, R. K. Kanwar, S. Krishnakumar, J. Watson, U. Vetrivel, and J. Narayanan, "Probing the biophysical interaction between Neocarzinostatin toxin and EpCAM RNA aptamer.," *Biochem. Biophys. Res. Commun.*, vol. 469, no. 2, pp. 257–62, Jan. 2016.
- Vimalin Jeyalatha, Malathi Jambulingam, Madhavan N Hajib. Stepwise Protocol for Cytospin-enhanced Smearing for Scraped Corneal Epithelial Cells. Applied Immunohistochemistry Molecular Morphology.2016;24:71-7
- R. Roy and K. Saurabh, "Bilateral acute ophthalmic artery occlusion in a case of giant cell arteritis.," *Indian J. Med. Res.*, vol. 143, no. 1, pp. 116–7, Jan. 2016.
- P. K. Shah, S. Sripriya, V. Narendran, and A. J. Pandian, "Prenatal genetic diagnosis of retinoblastoma and report of RB1 gene mutation from India," *Ophthalmic Genet.*, pp. 1–4, Feb. 2016.



- E. Rishi, M. V Govindarajan, J. Biswas, M. Agarwal, S. Sudharshan, and P. Rishi, "Syphilitic uveitis as the presenting feature of HIV.," *Indian J. Ophthalmol.*, vol. 64, no. 2, pp. 149–50, Feb. 2016.
- Neha Goel, Atul Kumar, Mahesh P Shanmugam, Muna Bhende, Raja Narayanan, Hidetaka Matsumoto, "Thinking Beyond Wet Age-Related Macular Degeneration," *Delhi J. Ophthalmol.*, vol. 26, no. 3, pp. 210–217, Mar. 2016.
- N. Murugan, J. Malathi, V. Umashankar, and H. N. Madhavan, "Resistome and pathogenomics of multidrug resistant (MDR) Pseudomonas aeruginosa VRFPA03, VRFPA05 recovered from alkaline chemical keratitis and postoperative endophthalmitis patient.," *Gene*, vol. 578, no. 1, pp. 105–11, Mar. 2016.

BOOK PUBLISHED:

- "Uveitis: An Update" Biswas J, Parthopratim Dutta Majumder, by Springer, 2015.
- "Diabetic Retinopathy Management Manual 2015" Taraprasad Das, Rajiv Raman, R Rajalakshmi, Padmaja K Rani, by National Programme for Control of Blindness.

CHAPTERS IN BOOKS PUBLISHED:

- Angayarkanni N, K. Coral, SR. Bharathidevi, "Toxicology" in Dr.Santhanam'S Text book of occupational optometry, First Edition, Sankara Nethralaya, 2015 pp 219-39
- Tarun Sharma, Rajiv Raman "Microincision Vitrectomy Surgery: The Answer to Manage Complications of Proliferative Diabetic Retinopathy" in Diabetes Clinical Case Series - 1", by Jaypee Brothers
- Meenakshi S, Srikanth R "Ophthalmology" in Partha's Management Protocols in Pediatric and Adolescent Practice by Jaypee Brothers.



COMPLETED PROJECTS

- 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]
- 2. Application of next generation sequencing technique to determine the whole genome sequence of laboratory isolates of *Enterococccus feaclias*, *Pseudomonas aeruginosa*, *Bacillus cereus* (Both sensitive and resistant strains) and application of bioinformatics approach to identify the vulnerable area of drug targets in the genome [Dr J Malathi]
- 3. Investigating the therapeutic potential of Lysyl Oxidase propeptide in angiogenesis and tumorogenesis [Dr K Coral]
- Contact lens wear induced changes in Keratoconus patients at the level of redox status inflammatory cytokines and collagen cross linking [Dr N Angayarkanni]
- 5. Anti angiogenic potential of the plant derived polyphenols, Elagic, Gallic, Chebulagic and Chebulinic acids: an in vitro study in retinal endothelial cells [Dr N Angayarkanni]
- 6. Molecular modelling 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 pilot "in vitro" studies [Dr V Umashankar]
- 7. Development of modulators of ornithine decarboxylase (ODC) for the therapeutic application in retinoblastoma [Dr V Umashankar]
- 8. Regulation of SNARE exocytotic machinery under physiological and pathological conditions of diabetes and obesity [Dr C Subbulakshmi]
- 9. Biomarkers pattern discovery of graded changes in the opacity of human lens in age-onset cataract: a proteomic approach [Dr Ananthkumar Badrinath]
- 10. Molecular genetic analysis of ocular developmental anomalies in Indian population [Dr S. Sripriya]
- 11. To investigate the cross-talk between oxidative stress and cellular methylation processes and dissect the functional role of epigenetically silenced gene in RB [Dr J Biswas]
- 12. To validate a panel of differentially expressed miRNAs from RB serum profile and correlate clinicopathologically [Dr S Krishnakumar]
- 13. To investigate the role of tumor microenvironment in RB progression [Dr S Krishnakumar]
- 14. Locked nucleic acid modified aptamer-siRNA Chimeric conjugates for improved chemosensitivity and eradication of cancer stem cells [Dr S Krishnakumar]



- 15. Identification of potential molecular inhibitors of all catalytic domains of Fatty Acid Synthase (FASN) at the enzyme activity and gene expression level [Dr V Umashankar]
- 16. CR -5265 2-Week dispensing cross-over evaluation of marketed silicone hydrogel contact lenses in an Indian population [Dr M Rajeswari]



ONGOING PROJECTS

- 1. 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]
- 3. A 12-month, phase III, randomized, visual acuity assessor-masked, multicenter study assessing the efficacy and safety of ranibizumab 0.5mg in treat and extend regimen compared to monthly regimen, in patients with neovascular age-related macular degeneration [Dr Muna Bhende]
- 4. A 12-month, phase III, randomized, double-masked, multicenter, activecontrolled study to evaluate the efficacy and safety of two individualized regimens of 0.5 mg ranibizumab vs. verteporfin PDT in patients with visual impairment due to choroidal neovascularization secondary to pathologic myopia (Brilliance) [Dr Tarun Sharma]
- 5. A Prospective, open label study to evaluate the Intraocular Pressure lowering effect of 0.15% w/v Forskolin solution in patients with Ocular hypertension or mild open angle glaucoma [Dr Ronnie Jacob George]
- 6. Normative data collection for Oculomotor functions using eye tracking technology in accordance with conventional method [Dr Ronnie Jacob George]
- 7. A Multi-Center Controlled, Safety and Efficacy Study of a Fluocinolone Acetonide Intravitreal (FAI) Insert in Subjects with Chronic Non-Infectious Uveitis Affecting the Posterior Segment of the Eye [Dr J Biswas]
- 8. CR:5201 Echo Ionic Silicone Hydrogel 6-month Extended Wear Investigation [Dr M Rajeswari]
- A Phase 2/3, Randomized, Double-Masked, Sham controlled Trial of QPI-1007 Delivered by Single or Multi-Dose intra vitreal injection(s) to subjects with Acute No-Arteric Anterior Ischemic Optic Neuropathy (NAION) [Dr S Ambika]
- 10. A multi-center, open-label, observational study to evaluate the efficacy and safety of intravitreal injections (IVI) of Ranibizumab in patients with visual impairment due to Diabetic Macular Edema(DME) [Dr Mohammad Arif Mulla]
- 11. Development of Low Cost Sweep VEP system [Dr Ronnie Jacob George]
- 12. Effect of riboflavin / UVA in treating patients with infectious keratitis: A pilot study on human subjects [Dr Prema Padmanabhan]
- 13. An *in-vitro* study to understand the effect of different concentrations of lignocaine on the fibroblasts growth. [Dr H N Madhavan]



- 14. 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 K Coral]
- 15. Peripheral Blood Gene expression profiling in Eales Disease [Dr K Coral]
- 16. Understanding the effect of Adiponectin mediated signaling pathways on retinal degeneration using human retinal explant culture for designing efficient neuroprotective agent [Dr C Subbulakshmi]
- 17. Regulation of Lysyl oxidase expression in lens epithelial cells and trabecular endothelium [Dr N Angayarkanni]
- 18. Corneal Endothelial Function in Health and Disease [Dr Prema Padmanabhan]
- 19. CTR1 (Copper transporter 1) as a therapeutic target for angiogenesis; understanding its cellular and molecular signaling in retinal angiogenesis [Dr S R Bharathi Devi]
- 20. Development of therapeutic molecules for diabetic retinopathy from studies on structure/function relationship of PON2 by cloning [Dr S R Bharathi Devi]
- 21. To elucidate the role of cystathionine beta synthase enzyme and hydrogen sulphide in retinal cells exposed to thiol compounds [Dr S R Bharathi Devi]
- 22. Insilco drug target identification in Chlamydial species through systems biology and molecular modelling approaches pertaining to the development of potential drug molecules [Dr V Umashankar]
- 23. 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 models [Dr V Umashankar]
- 24. Intervention of ciliopathy genes in the molecular pathology of BBS in Indian population [Dr S Sripriya]
- 25. Whole exome sequencing in Leber congenital amarousis (LCA) to identify novel gene(s) [Dr N Soumittra]
- 26. Proteomics based identification and Validation of urinary Biomarkers for Age-related Macular Degeneration and development of sensor [Dr J Biswas]
- 27. miRNA in Retinoblastoma progression, biomarkers and novel AptamermiRNA therapeutics [Dr S Krishnakumar]
- 28. Differentiation and characterisation of dental pulp cells to corneal epithelial cells [Dr S. Krishnakumar]
- 29. Use of Aptamer to increase the efficacy of HMGA2 targeted therapy in Retinoblastoma [Dr S Krishnakumar]
- 30. Exosomal microRNA as biomarkers of early and late stage Retinoblastoma. [Dr S Krishnakumar]



- 31. Proteomics and phosphoproteomics by mass spectrometry and flow cytometry in Retinoblastoma [Dr Sailaja Elchuri]
- 32. To Engineer a Aptamer-siRNA chimeric conjugates for targeting epithelial cancers [Dr Sailaja Elchuri]
- 33. miRNA clusters in retinal cytokine producing glia which control inflammation during HIV 1 Tat exposure: Implications for immune recovery uveitis. [Dr Nivedita Chatterjee]
- 34. Investigating the effects of HIV- 1 proteins in retinal blood brain barrier degeneration [Dr Nivedita Chatterjee]
- 35. Identification of Ocular Inflammatory mediators in Steven Johnsons Syndrome. [Dr Srividya. G]
- 36. Deciphering the role of LIN28B in retinoblastoma [Dr S. Krishnakumar]
- 37. Study on the efficacy of Ataluren to promote premature termination codon read-through in RDH12 (c.38C>A) nonsense mutation [Dr Sowmya Parameswaran]



PARTICIPATION IN THE CONFERENCE

- Dr J Biswas and Dr Vikas Khetan participated in the 30th Asia-Pacific Academy of Ophthalmology Congress at China from 1st to 4th April 2015. Dr Biswas made presentations on "Live intraocular parasites causing uveitis", "Eales' disease" and "Clinic pathological correlations in Iid & lesions" and Dr Vikas Khetan gave a presentation on "Adult onset retinoblastoma"
- Dr Srikanth R participated in the Strabismus and Pediatric Ophthalmological Society of India – midterm conference held at Ludhiana on 5th April 2015 and gave presentations on "Small Angle strabismus", "Ametropic Amblopia".
- Dr Pukhraj Rishi, Dr Meena Lakshmipathy and Dr Shweta S Agarwal attended the Delhi Ophthalmology Society Annual Conference, New Delhi from 10th to 12th April 2015. Dr Pukhraj Rishi made a presentation on "Newer advances in treatment of intraocular tumors; Dr Meena Lakshmipathy delivered a guest lecture on "Bacterial Keratitis" and Dr Shweta S Agarwal gave a guest lecture on "Vernal Conjunctivitis".
- Dr V Umashankar delivered an invited talk on "Ophthalmic Research and Bioinformatics" at The Second INAE-NATF Workshop on "Technology and Health-Care" at National Institute of Advanced Studies (NIAS), IISc Campus, Bangalore conducted from 15th to17th April 2015.
- Dr Muna Bhende participated in the Vitromacular Interface Problems II, Bengaluru, on 26th April 2015 and made a presentation on "Management of recurrent macular hole"
- Dr Rajiv Raman attended the Annual Meeting of the Association for Research in Vision and Ophthalmology, Denver, USA, from 3rd to 7th May, 2015 and made a poster presentation on "Genotype-Phenotype correlation in X-linked Retinoschisis"
- Dr Biswas J attended the Granulomatous Uveitis Workshop at Philippines, from 15th to 17th May 2015 and made a presentation on "Multifocal Serpiginoid Choroiditis"
- Dr Muna Bhende and Dr Pramod Bhende attended the "Celebrate Retina Celebrate Life" meet at Aditya Jyot Eye Hospital Pvt. Ltd, Mumbai, from 15th to 17th May 2015. Dr Muna Bhende made a presentation on "Swept Source OCT" and Dr Pramod Bhende made presentations on "Vitrectomy for myopic fovealschisis" and "Lens sparing vitrectomy for ROP".
- Dr Sripriya Krishnamurthy and Dr Ronnie George attended the World Glaucoma Congress at Hong Kong, from 06th to 09th June 2015. Dr Sripriya Krishnamoorthy gave a presentation on "Incidence of secondary ocular hypertension following nucleus drop in cataract surgery in a training centre" and Dr Ronnie George made presentations on "Anterior segment dysgenesis", "Lesser form population based study in India", "Progress of glaucoma from India" and "Mechanical laser in malignant glaucoma".



- Dr Pukhraj Rishi attended the International Society of Ocular Oncology Meeting held at Paris, France from 15th to 19th June 2015, and gave poster presentations on "Intra-arterial chemotherapy for retinoblastoma: first year results from India" and "Presentation of posteriorly-located, medium-sized choroiodal melanoma with extraocular extension in a 42year-old Asian Indian lady" and oral presentation on "Intravitreal chemotherapy for recurrent or refractory vitreous seeds in eyes with retinoblastoma"
- Dr Vikas Khetan, Dr Trupti Sudhir Patil participated in the Telangana Ophthalmic Society Meeting at Karimnagar, on 21st June 2015. Dr Vikas Khetan made a presentation on "Management of Intraocular Retinoblastoma Group A to C Classification"; DrTrupti Sudhir Patil on "Intraocular pressure measurement post refractive surgery and its correlation to amount of corneal tissue ablated "
- Dr Amala Elizabeth George participated in the Bangalore Ophthalmic Society Meeting at Bangalore, on 22nd June 2015 and gave a presentation on "Decoding Uveitis Workup".
- Dr N Soumittra delivered an invited talk entitled, "Molecular Profiling of Leber Congetinal Amaurosis on an Indian cohort" in the CME on Impact of Genetics in Medicine held at the Centre for Medical Genetics, Chennai on 4th July 2015.
- Dr K Lily Therese has been nominated as a team member for approving "BSL3 laboratory upgradation" for Bacteriology Department, National Institute for Research in Tuberculosis Centre (NIRT), Chennai on 8th July 2015.
- The Department of Cornea of Sankara Nethralaya organized the 2nd meeting of Ocular Surface & Keratoprothesis (OSKON) 2015 from 10th to 12th July 2015. The focus was on the ocular surface disorders and keratoprosthesis. International and national experts shared their experiences in their areas of expertise and avenues for further research were identified. The meeting received a very warm response with the number of participants being around 250.
- Dr T S Surendran, Dr Bipasha Mukherjee, Dr Kavitha Kalaivani, Dr Sumita Agarkar, Dr Pukhraj Rishi, Dr Parveen Sen and Dr Mona Kurana participated in the Annual Meeting of Tamil Nadu Ophthalmic Association at Madurai from 24th to 26th July 2015. Dr Surendran made presentations on "Coping with complications and re-surgeries"; "Managing an institution" and "Use of Botulinium toxin a injection for strabismus"; Dr Bipasha Mukherjee on "Vascular lesions of the orbit", "Orbital trauma" and "Vascular lesions of the orbit"; Dr Kavitha Kalaivani on "The perpetual dilemma", "Uveitic cataracts in children" & "Traumatic cataract"; Dr Sumita Agarkar gave presentations on "Pediatric cataracts with associated lenticular anomalies" & "Difficult scenario in concomitant strabismus"; Dr Pukhraj Rishi on "Fundus Auto fluorescence - Ebony & Ivory truths"; DrParveen Sen on "Electrophysiology - The telling undercurrents" and Dr Mona Kurana on "Medical Therapy for Glaucoma-Practical Tips".
- Dr Krishnakumar S, Dr Angayarkanni N, Dr S Sripriya and Mr Ravikanth Danda attended the Indian Eye Research Group (IERG) ARVO Conference at L.V. Prasad Eye Institute (LVPEI), Hyderabad from 25th to 26th July



2015. Dr S Krishnakumar gave a lecture on 'Aptamer chimera targeting EpCAM'; Dr Angayarkanni delivered an invited talk on "Low levels of BDNF in Diabetic retinopathy" and made poster presentations on "The effect of phyto-compounds on the mesenchymal changes in RPE" and "Brain derived neurotrophic factor and its relevance in diabetic retinopathy" and. Dr Sripriya delivered an invited talk on "Targeted next generation sequencing in ocular developmental anomalies".

- Dr Pramod S Bhende and Dr Chetan Rao participated in the Asia Pacific Vitreoretina Society Meeting from 31st July to 2nd August 2015. Dr Pramod Bhende made a presentation on "ROP-Laser treatment Tricks and pitfalls", Poster presentations on "Vitrectomy for myopic tractional maculopathy (MTM) intraopertive findings, functional and anatomical outcome" and "Displaced trans-scleral fixated intraocular lens Refixation, anatomical and functional outcome"; Dr Chetan Rao made a poster presentation on "Combined sclera suture fixated intra-ocular lens and parsplana vitrectomy for ocular trauma- A study of functional and functional outcome", and a paper presentation on "Structural and functional characterization of Benign Flecked retina on multimodal imaging".
- Dr S Krishnakumar gave a keynote address on "Current Trends in Translational Medicine" at the Indo US Meet held at Sathyabama University, Chennai, on 1st August, 2015.
- Dr Prema Padmanabhan participated in the BMJ Class, from 3rd to 4th August 2015 at West Bengal and made presentations on "Keratoconus – A familiar Stranger" and "Fuchs Endothelial Dystrophy – A fresh perspective on an old disease".
- Dr Tarun Sharma attended the BMJ Master class in Ophthalmology 2015 on 6th August 2015 at Pune and gave a presentation on "Macula Potpourri".
- Dr N Angayarkanni delivered a guest lecture on "RPE in health and Diseases" in the first Annual Advanced Lecture Series in Ocular Pharmacology held at Siddaganga Institute of Technology (SIT), Tumkur, Karnataka along with our cornea team on 8th August 2015.
- Dr Muna P Bhende and Dr Pukhraj Rishi participated in the 9th Indian AMD Congress at New Delhi on 8th & 9th August 2015. Dr Pukhraj Rishi gave a présentation on 'An interesting case of a choroidal cleft'.
- Dr Vathsalya Vijay participated in the Curbside Clinix CME held at Narayana Nethralaya, Bangalore, on 9th August 2015 and gave a paper presentation on "Combined Radiological and Surgical Intervention for Periorbital AV Malformation".
- Dr N Angayarkanni delivered a guest lecture on "Basic science into clinical practice" in ESO's International Vision Science and Optometry Conference (EIVOC) held at Confluence Banquets and Resorts, Mamallapuram on 15th August 2015.
- Dr Rajiv Raman attended the International Laser Society meet at Indore, on 21st August 2015 and gave presentations on "Lasers for Diabetic macular edema", "Micropulse laser" and "NAVILAS".



- Dr J Narayanan attended the workshop organized by NPMASS Display Cum Demo Exhibition held at Bangalore on 22nd August 2015.
- Dr K Lily Therese and other Sankara Nethralaya faculty attended the CME programme "Cataract Catalyst" conducted at Hayatt Regency, Chennai on 23rd August 2015.
- Dr Rajiv Raman participated in the Indore Ophthalmic Association Retina Update meet on 23rd August 2015 and made presentations on "DME management guidelines" and "Preferred practice pattern in intravitreal injections".
- Dr Tarun Sharma attended the ARVO Conference Diabetic Retinopathy Battling the Global Epidemic from 27th to 28th August 2015
- Dr Sumita Agarkar and Dr Rajiv Raman participated in the Focus Annual Meeting of Bombay Ophthalmologists' Association at Mumbai on 30th August 2015. Presentations on "Evaluation of special children" and "Factors affecting surgical outcomes" by Dr Sumita Agarkar and "Diabetic macular edema & treatment guidelines" by Dr Rajiv Raman were made.
- Dr Sumita Agarkar participated in the 3rd World Congress of Paediatric Ophthalmology and Strabismus at Barcelona, Spain, from 3rd to 8th September2015, and gave presentations on "Surgery in myasthenia gravis" and "Effect of lens sparing vitrectomy on myopia children after cataract surgery".
- Dr Prema Padmanabhan and Dr Sudhir R R participated in the EuCornea Conference at Spain from 4th to 5th September 2015. Dr Prema Padmanabhan gave a presentation on "Corneal Collagen Cross-linking (CXL) comparison of response in pediatric and adult keratoconic patients" and made a poster presentation on "Co-existing keratoconus and Fuchs Endothelial corneal dystrophy (FECD): Challenges in diagnosis and management". Dr Sudhir made a poster presentation on "Changes in corneal thickness after dilatation", and presented a paper entitled "Long term results of collagen cross linking (CXL) for progressive keratoconus in pediatric age group".
- Dr Prema Padmanabhan and Dr Sudhir R R attended the European Society of Cataract & Refractive Surgeons Meet at Spain from 5th to 9th September 2015. Dr Prema Padmanabhan made poster presentations on "Collagen Cross Linking (CXL) for progressive keratoconus: long term results and the impact of cone location and magnitude" and "Diagnostic characteristics of post-LASIK keratectasia: a proposed scoring system" and Dr Sudhir R R made presentations on "Fish-mouth compression suture in the management of corneal burn due to Phacoemulsification" and "Collagen cross linking: comparison of results using iso-osmolar and hypo-osmolar 0.1% riboflavin solution for the treatment of progressive keratoconus".
- Dr Sumita Agarkar participated in the Andhra Pradesh Ophthalmic Society Meeting at Tirupati on 12th September 2015 and gave a presentation on "Management of esotropia in Children".



- Dr Muna P Bhende participated in the 15th EURETINA Congress in France, from 14th to 22nd September 2015 and made presentations on "Residual pockets of SRF after retinal reattachment - a case series" and "Pediatric giant retinal tears: Management outcomes"
- Dr Prema Padmanabhan participated in the Phaco-Refractive Meet at Bangalore on 19th & 20th September 2015, and made presentations on "Refractive Cataract Surgery", "Tackling astigmatism during cataract surgery: Role of Toric IOL"
- Dr J Biswas attended the RIO GOH and delivered the Prof. E. T. Selvam Endowment Lecture on "Can ophthalmic pathology be interesting?" on 23rd September, 2015.
- Dr S Krishnakumar and Ms. Gayathree K participated in the International Angiogenesis Conference at SASTRA University, Thanjavur from 23rd to 25th September, 2015. Dr Krishnakumar delivered a lecture on 'Epcam and Angiogenesis in Retinoblastoma' and Ms. Gayathree presented a poster entitled "Hyperglycemia induces early growth response-1 (EGR1) in human diabetic retina mediating abnormal vascular changes in diabetic retinopathy".
- Dr Dhanashree Ratra attended the Phacoret Conference at Puttaparthi, from 24th to 25th September, 2015 and presented papers entiled "Scleral fixated IOLs", "Management of dislocated IOLs" and "Management of Supra-choroidal hemorrhage".
- Dr Sudha K Genesh attended the 13th International Ocular Inflammation Society & Foster Ocular Immunology Society Meeting at San Francisco, USA from 24th to 27th September 2015. She was the Chair person and Moderator for the symposium on "Ocular TB in an endemic Country" and made a presentation on "Clinical manifestations of Ocular TB in endemic country"; gave a guest lecture on "Cataract surgery in pediatric uveitis" in the symposium of Pediatric Uveitis".
- Dr S Sripriya and Dr Soumittra attended the Expert group meeting as a part of Asian Eye Genetics Consortium held at AIIMS, New Delhi on 26th September 2015.
- Dr J Malathi, Ms. M K Janani and Ms. M Vimalin Jeyalatha participated in the IAMM Conference in Clinical Microbiology ARISE – 2015 held at SRM University, Chennai from 28th & 29th September 2015. Dr Malathi delivered an invited lecture on "Next generation sequencing in diagnosis and research"; Ms. Janani made a poster presentation on "Novel Immune Regulatory Pathway Associated with Epstein Barr Virus (EBV) and the Recombinant EBV Protein Mediated Inflammation in Retinal Pigment Epithelium (ARPE-19)" and Ms. Vimalin Jeyalatha on "Response of Retinal Pigment Epithelial Cells towards Leptospiral recurrent Uveitis Antigens".
- Mr. Ravikanth Danda received 'Travel fellowship grant' from DBT Government of India for attending HUPO Conference held at Vancouver, Canada from 27th September 2015 to 1st October 2015.



- Dr Priya Delampady attended the XXV Silver Jubilee Annual Conference of the Glaucoma Society of India, Mumbai from 2nd to 4th October 2015 and made a poster presentation on "Correlation of defect depth and defect pattern of Central Visual Fields with mGCC of OCT".
- Dr Shantha B, Dr Ronnie George, and Dr Vineet Ratra participated in the Annual Meeting of Glaucoma Society of India 2015 at Mumbai, from 2nd to 4th October 2015. Dr Shantha made presentations on "The classical trabeculectomy technique", "Easier & safer management of tube complications", "Using the CIGTS study findings in clinical practice" and "Role of perimetry in the early diagnosis of glaucoma: FDP/SWAP flickerdefined-form perimetry"; Dr Ronnie George on "Very high IOP 7 painful blind eye what to do?", "Taking charge and creating a plan", "Framing research question", "Epidemiology of angle closure disease in India", "Imaging and its potential as a screening tool for angle closure", "Management for early postoperative hypotony", "How I was finding from the OHTS/EGPS study in treating ocular hypertension", and "Eye tracking in perimetry". Dr Vineet Ratra gave a presentation on "Cataract with POAG controlled with monotherapy combined surgery".
- Dr Rajiv Raman participated in the CCDR Cycle National Expert Curriculum Review Meet on 9th October 2015 and made a presentation on "Developing Curriculum for DR training".
- Dr Tarun Sharma Participated in the North Zone Ophthalmic Society Meet at Haryana from 9th to 11th October 2015 and gave a presentation on "Is it Wet AMD?"
- Dr H N Madhavan participated in the CME programme on 10th October 2015 held at Nichi-in Centre for Regenerative Medicine, Mylapore and gave an invited lecture on "Mebiol Gel, A thermo reversible polymer as a scaffold for three dimensional culture of Huh7 cell line with improved hepatocyte differentiation marker expression and HCV replication".
- Dr Nivedita Chatterjee attended the Conference on "Addiction: latest research and the impact of addiction on our lives" at Florey Institute of Neuroscience and Mental Health, Melbourne, Australia on 22nd October, 2015.
- Dr Nivedita Chatterjee gave an invited lecture on "Modulating innate immunity in the retina; an in vitro model" at University of Melbourne, Department of Optometry and Vision science" on 22nd October, 2015.
- Dr Dhanashree Ratra participated in the Cataract Kaleidoscope Golden Jubilee celebrations of Regional Institute of Ophthalmology, from 23rd to 25th October, 2015 at Sitapur and made presentations on "Management of Cataract and diabetic retinopathy" and "Cataract in Vitrectomized eyessurgical pearls".
- Dr J Biswas, Dr Sudha K. Ganesh, Dr S Sudharshan and Dr Parveen Sen attended the Uveitis Society of India meeting at Puducherry from 23rd to 25th October 2015. Dr Biswas gave presentations on "A case presentation of granulomatous anterior uveitis with discussion" and "Retinal vasculitis in Indian scenario"; Dr Sudha K. Ganesh on "Management of Herpetic anterior uveitis: Drug of choice and duration of treatment" and "Special considerations in pediatric uveitis cataracts"; Dr



S.Sudharshan on "Uveitis cataract surgery in HIV" and Dr Parveen Sen on "Dislocated IOL in Uveitis surgical management options".

- Dr Nivedita Chatterjee gave an invited lecture on "Alleviating HIV Tat induced inflammation: implications for endocannabinoids as therapeutics" at Deakin University, Australia, on 27th October, 2015.
- Dr J Malathi delivered an invited lecture entitled "Detection of uncultivable and unidentifiable microbes" during National Symposium on Molecular Techniques in Diagnosis & Research at Central Inter-Disciplinary Research Facility (CIDRF), MGMCRI Campus, Puducherry on 31st October 2015.
- Mr. Purushothaman participated in the Histotechnology CME Programme at Adyar Cancer Institute on 31st October, 2015.
- Dr Mohd Shahid Alam and Dr Kirthi Koka attended the Ocular Trauma Society of India Conference, Guwahati on 31st October 2015. Dr Mohd Shahid Alam made a presentation on "Functional & anatomical results of canalicular tear repair with monocanalicular intubation" and Dr Kirthi Koka on "Luck by Chance: Sino–orbital foreign body, an uninvited foreigner".
- Dr J. Biswas attended the AIDS Conference at Mumbai from 29th October to 1st November, 2015.
- Dr Bipasha Mukherjee, Dr Nirmala Subramanian, and Dr Swakshyar Saumya Pal participated in the Ocular Trauma Society of India Meet at Guwahati, from 31st October to 1st November 2015. Dr Bipasha Mukherjee made a presentation on "Evaluation of Post operative Visual Loss" and "Chemical & Thermal injuries of the orbit & adnexa", Dr Nirmala Subramanian on "Various aspects of Iid and adenexa repair post molten metal injury" and Dr Pal on "Size does matter - a challenging case of an intraocular glass foreign body".
- Dr Prema Padmanabhan participated in the Cornea Connect by Aravind Hospital, Coimbatore from 31st October to 1st November 2015 and made presentations on "Contact Lenses – do they still play a role?", "Can corneal endothelium re-grow?" and "Have my indications changed?"
- The first meeting on "Formulation of PCV Guidelines for India" was conducted at Kochi from 7th to 8th November 2015 and it was attended by Dr Muna P Bhende.
- Dr Muna P Bhende participated in the Annual Meeting of Ophthalmic Society of West Bengal, Kolkata, from 14th to 15th November 2015 and made presentations on "Current Management of PCV" and "Panelist: Challenging cases- Medical Retina".
- Dr Angayarkanni attended the 42nd National Conference of the Association of Clinical Biochemists of India at PGIMER, Chandigarh, from 25th to 28th November 2015 and delivered an invited talk on "Serum PONase activity in relation to Lipid profile and PON1 gene variants in Age Related Macular Degeneration".
- Dr K Lily Therese and Mr. N Murugan attended 39th Microcon 2015 -National Conference of the Indian Association of Medical Microbiologists at Department of Microbiology JIPMER, Puducherry from 27th to 29th



November 2015. Mr. Murugan presented a poster entitled "Development and application of Set of Multiplex PCRs for rapid diagnosis of drug resistant genes among clinical isolates of Pseudomonas aeruginosa".

- Dr S R Bharathi Devi presented a poster titled on "Paraoxonase 2 Down regulates ER stress and inhibits the CML induced inflammatory response in macrovascular endothelial cell" in the 14th FAOBMB congress and 84th Annual meeting of SBC(I) at Centre for Cellular and Molecular Biology at Hyderabad from 27th to 30th Nov 2015.
- Dr Geetha Iyer, Dr Sudhir R R and Dr Meena Lakshmipathy participated in the Keracon 2015 – 3rd National Meeting of Cornea Society of India at Kolkata, from 11th to 13th December2015. Dr Geetha Iyer gave presentations on "Ocular chemical injuries – A stepwise approach to visual recovery" and "Spurious eye drops/Chemical injuries – case study"; Dr Sudhir on "Panelist: Biostatistics Basics" and Dr Meena Lakshmipathy on "Role of AC tap".
- Dr T S Surendran attended the Strabismus & Pediatric Ophthalmological Society of India Conference at Coimbatore on 12th December 2015 and chaired the "Basics of Strabismus" session.
- Dr Angayarkanni participated in the Center for Bio-separation Technology Meet at Vellore Institute of Technology, Vellore, on 8th January 2016 and gave a guest lecture on "Serum Paraoxonase activity in relation to lipid profile and PON1 gene variants in age-related macular degeneration".
- The Department of Neuro-ophthalmology of Sankara Nethralaya organized an international conference, SYNAPSE 2k16 - Symposium in Neuro Ophthalmology : Afferents Plus Efferents on 9th & 10th January 2016. The conference was attended by nearly 300 delegates.
- Dr Geetha Iyer attended the 1st International Stevens Johnson Syndrome Symposium at Japan, from January 23rd to 24th 2016 and gave a guest lecture on "Ocular Sequelae of SJS - Our understanding over 25 years".
- Dr Vinata Muralidharan, Dr Parveen Sen, Dr Shantha B, Dr Bipasha ••• Mukherjee, Dr Ambika S, Dr Amala Elizabeth George, and Dr Rama Rajagopal participated in the World Ophthalmology Congress at Mexico, from February 5th to 9th, 2016. Dr Vinata Muralidharan made a poster presentation on "Outcome of vitreous surgery for complications of proliferative diabetic retinopathy in type I diabetes in subjects aged 30 years"; Dr Parveen Sen on "Outcomes of pediatric scleral fixated posterior chamber intraocular lens implantation in a tertiary eye care centre in India" and Dr Shantha on "Prevalence, incidence and risk factors for the development of elevated intraocular pressure following penetrating keratoplasty". Dr Bipasha Mukherjee made poster presentations on "Wegener's granulomatosis with solitary eyelid involvement manifesting as acquired ptosis" & "Rare but beware- malignancies of the lacrimal sac"; Dr Ambika on "Clinical features and treatment outcome of Pediatric Ocular Myasthenia Gravis (POMG) in an ophthalmic institution"; Dr Amala Elizabeth George on "Viral anterior Uveitis"; Dr Rama Rajagopal on "Combined corneal and posterior segment infections - etiology, role of Landers keratoprosthesis and outcome" and "Surgical excision in conjunctival squamous cell carcinoma (SCC) - clinical profile, risk factors and surgical outcome".



- Ms. M Vimalin Jeyalatha attended the training programme entitled "Optimisation techniques for Western blot & Immunohistochemistry" conducted at the Indian Institute of Technology, Chennai on 25th February 2016.
- Dr Biswas J, Dr T S Surendran, Dr Ekta Rishi, Dr Sudha K Ganesh, Dr Meenakshi S, Dr Jaydeep Avinash Walinjkar, Dr Jaya Prakash, Dr Veena Baskaran, Dr Bipasha Mukherjee, Dr R R Sudhir, Dr Suchitra Pradeep, Dr Rajiv Raman, Dr B Shantha, Dr Amala E George, Dr Srikanth R, and Dr Sumita Agarkar attended the 74th Annual Conference of All India Ophthalmological Society at Kolkata from 24th to 28th February 2016. Dr Biswas made presentations on "Update in tubercular uveitis", "Balancing academics and clinics", "Inflammatory venous occlusions", "Leadership in ophthalmology in private institution" and "Safety and efficacy of mycophenolate mofetil in intermediate uveitis; Dr Surendran on "Synoptophore", "Orthoptic examination", "Refraction errors in children", "Diplopia charting" and "IC: Pearls in refractive errors in children"; Dr Ekta Rishi on "Role of PCR in Mycobacterium tuberculosis endophthalmitis; Dr Sudha Ganesh on "Updates on infections uveitis viral retinopathy" and Dr Meenakshi on "Evaluation of squint". Dr Jaydeep Avinash Walinjkar made poster presentations on "Short-term changes in choroidal thickness after bevacizumab for neovascular AMD measured by SS-OCT", "CNVM complicating the management of circumscribed choroidal haemangioma (CCH) – A rare phenomenon", "Analysis of choroidal thickness in eyes with DME treated with focal laser using SS-OCT" & "Chorioretinal atrophy after successful macular hole surgery in a case of atypical RP"; Dr Jaya Prakash made poster presentations on "Outcome of pars plana vitrecotmy for complicated uvieitis in children and young adults" & "Clinical profile and outcomes of uveitis in young patients undergoing para plana vitrectomy" and Dr Veena Baskaran on "Atypical CSR". Dr Bipasha Mukherjee gave a poster presentation on "Lacrimal sac sarcoidosis mimicking dacryocystitis" and a paper presentation on "Epidemiological study on benign lesions of the eyelids"; Dr Sudhir made paper presentations on "Pterygium surgery and amniotic membrane transplant", " Biostatistics in Ophthalmology", "How to set up a paperless hospital" & "Need for EMR in ophthalmology"; Dr Suchitra Pradeep made a paper presentation on "Update on treatment of infectious uveitis"; Dr Rajiv Raman on "Comparison of FFA and OCT findings in various stages of parafoveal telangiectasia", "Acute endophthalmitis following intravitreal Anti VEGF and triamcinolone acetonide injections", "Qualitative and quantitative study of choroid in Vogt Koyanagi Harada's disease by Swept source OCT" and "Eylea in AMD". Dr B Shantha made poster presentations on "Prevalence, incidence and risk factors for the development of elevated intraocular pressure following penetrating keratoplasty", "IC: Surgical management of glaucoma in uveitic eyes", "IC: Surgical management of uveitis" & "IC: A multidisciplinary approach"; Dr Amala George made a paper presentation on "Viral anterior uveitis"; Dr Srikanth made poster presentations on "Teacher's in ophthalmology programme" & "Practice pattern of NLD obstruction messaging technique among practitioners"; Dr Sumita Agarkar made paper presentations on "IC: controversies in pediatric cataracts" & "Intraocular lens in uveitis cataract within the consensus" and Dr Vikas Khetan made a presentation on "Enucleation after chemotherapy".



- Dr B Shantha attended the Sri Lanka Ophthalmology Society Meeting at Colombo, from 12th to 13th March 2016 and made presentations on "Anterior segment imaging in glaucoma" and "Diagnostic dilemmas in POAG".
- The SN ONGC Department of Genetics and Molecular Biology organized the 41st Indian Society of Human Genetics Annual Meeting & International Conference (ISHG 2016), at Sri Mutha Venkata Subba Rao Concert Hall, Harrington Road, Chennai, from 3rd to 5th March 2016. The conference was attended by nearly 400 delegates. Prof. Bainsbridge, Vitreo-retinal Surgeon from UK, Dr Myles Axton, Chief Editor, Nature Genetics Journal, USA, Dr Sowmya Swaminathan, Director General, Indian Council of Medical Research and other distinguished scientists from many National and International institutes participated in the conference.
- Dr J Narayanan attended National workshop on "Protein Engineering and Design" held at IISER, Mohali between 15th and 19th March 2016.
- Dr Biswas J, Dr Sudha K Ganesh, and Dr Bhaskar Srinivasan participated in the 31st Congress of the Asia-Pacific Academy of Ophthalmology (APAO), Taipei, from 24th to 27th March 2016. Dr Biswas J gave presentations on "Tubercular uveitis", "Tubercular vasculitis", and "Biopsy pathology of uveitis"; Dr Sudha Ganesh on "Management of cataract in Uveitis eye" and Dr Bhaskar Srinivasan on "Devastating Ocular Surface Diseases".



DISTINGUISHED VISITORS

- His Excellency, Dr. K. Rosaiah, Governor of Tamil Nadu visited our Foundation on 7th April 2015 to inaugurate Lions Diabetic Retinopathy Skills Transfer Training Programme.
- Lion Robert "Bob"E.corlew, Second Vice President, Lions Clubs International visited our foundation on April 07, 2015.
- Dr. P. Prasannaraj, Additional Secretary from Medical Council of India, New Delhi, visited the research laboratories on 16th April 2015.
- Dr. Arvind from Massachusetts Institute of Technology (MIT), Boston, USA visited the Genetics Lab on 17th April, 2015.
- Dr. Vieal Shah, Unipath Laboratory from Ahmadabad visited the L & T Microbiology Research Centre on 23rd April 2015.
- Dr. Narendra Nayar, A J Institute of Medical Science visited the L & T Microbiology Research Centre on 25th April 2015.
- Mr. Kyungsoo Kim, Consul General of the Republic of Korea visited our foundation on 20th May 2015.
- Mr. Harjinder Singh Lallie, Senior Teaching Fellow (Cyber Security), Course leader for Msc Cyber Security & Management, University of Warwick, UK, visited our foundation on 4th June 2015 and gave a talk on "Cyber Security – Threats, challenges in Healthcare and Medical devices".
- Dr. Arup Das, Chief Ophthalmology Regents Professor, University of New Mexico School of Medicine, USA visited our foundation on 12th June 2015 and gave a talk on " Diabetic Retinopathy".
- Dr. Sharath Patil and Mr. Jagadesh Sastri from Lions Club team from Nasik visited the Genetics Lab on 15th June 2015
- Mr. Gaoussou M, Minister of Transport, Cote d`lvoire, Mr Sainy Tiemele, Tiemele, Ambassador of Cote d`lvoire at India, visited our foundation on 1st July 2015
- Dr. S. V. Eswaran, Emeritus Scientist, Council of Scientific and Industrial Research, visited the research laboratories on 4th July 2015.
- Dr Daniel B Rootman, Doheny Eye Center UCLA Pasadena, California visited our foundation on 14th July 2015 and gave a talk on "Assessment of thyroid eye disease & Orbital vascular disease"
- Dr. G.V.S.Murthy, Dr. Raghupathy and his team from Indian Institute of Public Health at Bangalore visited the research laboratories on 15th July 2015.
- Dr. Bibhaskar, Consultant & Head, Department of Genetics, Madras Medical Mission, Chennai visited the Genetics Lab on 15th July 2015



- Ms Khadija Hatim Yusufali Instructor for blind & visually impaired, Canada visited our foundation on 20th July 2015 and gave a talk on "White reflex in a child"
- Dr. Jagat Kanwar from Deakin University, Australia visited the Ocular Pathology Lab on 5th August 2015.
- Mr. Craig Mcfarlane, Director of Educational and Professional Services, Essilor Amera, visited our foundation on 7th August, 2015.
- Mr. Jagdish Mithu Chanrai, Founder Mission for Vision visited our foundation on 10th August 2015.
- Dr Rowan Candy, Associate Professor, Indiana University School of Optometry, USA visited our foundation on 19th August 2015 and gave a talk on "How do babies see".
- Dr. James Armitage, Head and Dr. Richa Verma, Lecturer, Vision Sciences, from Deakin University, Australia visited our research laboratories on 12th August 2015.
- Ms. Judith Fox, sister of Terry Fox visited our foundation on 22nd August 2015.
- Mr. Stanley Gomes, Senior Trade Commissioner from Indo Canadian High Commission from Canada, with his wife, visited the Pathology laboratory on 25th August, 2015
- Dr. Akhilesh Pandey, Professor, Johns Hopkins University School of Medicine, USA and Dr Harsha Gowda, Scientist, Institute of Bioinformatics, Bangalore visited the research Laboratories 8th September 2015
- Dr. UN Das and Mrs. UN Das visited the Biochemistry Lab on 29th September 2015.
- Dr. Jacob VV, Scientist, Department of Science and Technology (DST), from New Delhi visited the Biochemistry Lab on 12th October 2015.
- Dr. R K Shukla, Department of Zoology, St Xavier's College, Ranchi, Jharkhand, visited the Biochemistry Lab on 24th October 2015.
- Prof Narasing A Rao, Ophthalmic Pathology Laboratory & Uveitis Service, USC Eye Institute, USA visited our foundation and gave a talk on "Retinal Vasculitis" on 27th October 2015.
- Dr Gaurav K. Shah, M.D., Prof. of Clinical Ophthalmology & Visual Sciences, Director of Vitreo retinal Fellowship Program, Washington University School of Medicine, visited our foundation on 7th January 2016 and gave a lecture on "Retinal Detachment and Challenges & Update on Ocular Imaging"
- Prof. Luis Afonso, Director in International Research Training, Deakin University, Australia, visited our research laboratories and interacted with Scientists on 18th February 2016.



- Dr. Myles Axton Chief Editor, Nature Genetics, from New York visited our foundation on 2nd March 2016.
- Prof. James Bainbridge Professor of Retinal Studies, from UCL Institute of Ophthalmology, UK visited our foundation on 5th March 2016.
- Dr. Aksai Anand, Editor, Annals of Neurosciences from PGIMER, Chandigarh visited the L & T Microbiology Research Centre on 5th March 2016.
- Mr. A K Gayan, Ministry of Health and Quality of Lfe of the Rebulic of Mauritius visited our foundation on 15th March 2016.
- Dr. Neetu Mundra from Sir H.N.Reliance Foundation Hospital from Mumbai visited our foundation.