



Editorial

Of Late, there has been a surge in the number of continuing medical education programmes conducted at Aravind, This has become more or less like a monthly activity, with each centre taking up responsibility of organising the event. Of all the CMEs conducted so far, Cutting Edge '2019 held at Aravind-Pondicherry stands out. Going green, thinking green and acting green was the mantra from the start to finish making the CME an exemplar for zero waste and it turned out to be a huge success.

As part of capacity building of ophthalmologists, Cornea Services at Aravind-Madurai organised a workshop on Descemet's Membrane Endothelial Keratoplasty in collaboration with SightLife.

LAICO regularly organise review meetings to assess the performance of partner hospital towards achieving the set targets, benchmark their performance with their peers, and suggest necessary recommendations to improve the services. Meeting of LAICO's partner hospitals under SCALE project was held at HV Desai Eye Hosptial.

News about these and many more feature in this issue.

Cutting Edge,
Aravind-Pondicherry

July 2019

Accolades

Awards at Paediatric Retina Summit 2019

📍Chennai 📅 July 11-13

Dr. Harshal Gondhale, Medical Officer, Retina Services, Aravind-Madurai won the award for the best photograph, *Combined hamartoma of retina and RPE* at the Paediatric Retina Summit 2019.

Dr. Prerana Shah won second prize for the video, *Raising the barrier for pars plana vitrectomy for retinopathy of prematurity*.

Vocational Excellence Award for Dr. Usha Kim

📍Madurai 📅 July 30

Dr. Usha Kim received the award from Rotary Club in appreciation of her exemplary contribution in the field of medicine and her commitment and dedication to high moral and ethical values.



Legends in Ophthalmology Award for Dr. P. Namperumalsamy

📍Madurai 📅 July 28

On the eve of Doctors’ Day celebration, Dr. P. Namperumalsamy, Chairman Emeritus – AECS was honored with the award by Indian Medical Association, Madurai in appreciation of his meritorious medical services rendered to the society.

Aurolab

Graduation day for Production Staff

📍Aurolab 📅 July 27

Dr. G. Natchiar, Director-Emeritus was invited as chief guest for the graduation day. The programme started with prayer song followed by the newly graduated production staff taking oath holding candles. Best performers were awarded by Dr.G. Natchiar. Trainees shared their experiences about Aurolab. Dr. G. Natchiar gave an inspiring speech. Mrs. Mahalakshmi explained the roles and responsibilities of newly graduated staff.



Conferences attended

Pandora's Box – Uvea 2019

Dr. Rathinam

- *West Nile Virus retinitis and Leptospiral uveitis*
- *Serous RD in uveitis-VKH and others*
- *Ocular TB- active infection or immune mediated inflammation*



26th ARVO-India | IERG 2019

Prof. K. Dharmalingam chaired Dr. Venkat Reddy oration lecture. Prof. VR. Muthukkaruppan, Dr. P.Sundaresan, Dr. C. Gowri Priya and Dr. Senthil Kumari gave invited talks on their recent research findings.

Dr. A.Vanniarajan, Dr. D. Bharanidharan and Dr. J. Jeya Maheswari participated in the meeting and interacted with the delegates. Ms. O.Ruthra got the best poster presentation award. Travel awards were given to Durga, Irene Daniel and Sree Viswarubhini.

Invited Talks:

Dr. Senthilkumari Srinivasan – *–Dexamethasone-induced Ocular Hypertension (DEX-OHT) in Indian Donor Eyes underPerfusion Culture*

Dr. P.Sundaresan – *POAGome: Genes associated with Primary Open Angle Glaucoma*

Prof. VR.Muthukkaruppan – *–Biology of the Adult Human Ocular Stem Cells and Their Importance in Health and Disease of the Eye*

Dr. C. Gowri Priya –*miRNA regulating Limbal epithelial stem cells*

Oral Presentations:

A. Divya – *Proteomic analysis of Aspergillus flavus infected Human Corneal Epithelial cell phagosomes*

C. Prakash – *Investigation of nuclear gene involvement in LHON pathogenesis*

Poster presentations:

O. Ruthra –*Surface Proteome and Surface Morphology of Melanised and Non-melanised Conidiospores of Aspergillus flavus*

KRP. Niranjana – *Quantitative profiling of tear proteome reveals down regulation of Zinc alpha-2 glycoprotein in Aspergillus flavus keratitis patients*

D. Irene – *Molecular mimicry between leptospiral antigen and human lens proteins: A possible trigger for cataract formation in leptospiral uveitis patients*

P. Saranya – *Characterization of adult tissue resident stem cells in the human anterior lens epithelium*

K. Saraswathi – *Clinical and genetic analysis of ocular adnexal lymphoma*

K. Jeyaprakash – *Investigation of Human papillomavirus in non-familial retinoblastoma patients*

P. Gowri – *Molecular Genetics of Mitochondrial Genes Associated with Leber's Hereditary Optic Neuropathy (LHON)*

Anindita Rao – *Meta-analysis of Microarray Data Reveals Dysregulated Cancer Pathways in Retinoblastoma*

A. S. Sriee Viswarubhiny – *Whole Exome Sequencing in Two family trios with Leber's Congenital Amaurosis*

M. Durga – *Immunophenotypes of Macular corneal dystrophy in Indian population*

R. Sivaganesa Karthikeyan – *Genotyping and Phylogenetic analysis of Ribosomal nuclear subunit (Rns) in Acanthamoeba spp. Causing keratitis*

A. Selva Pandian – *Evaluation of Direct polymerase chain reaction, conventional PCR and q-PCR methods with that of gold standard culture method for the diagnosis of infectious endophthalmitis*

G. Ramesh Kumar – *Epidemiology and molecular identification of Nocardia spp. causing Endophthalmitis by multi locus sequence analysis (MLSA)*



Paediatric Retina Summit 2019

📍Chennai 📅 July 11-13

Dr. Renu P Rajan

– *Intravitreal melphalan regressed retinoblastoma but with an unexpected fall up*

Dr. Aditya Maitry

– *Intravitreal Bevacizumab in APROP : factors predictive of outcome*

Cutting Edge 2019

📍L.V.Prasad Eye Institute, Visakhapatnam 📅 July 07

Dr. Usha Kim

– *Key note address: Ptosis evaluation & management*

– *Orbital tumors*

Telangana Ophthalmological Society- Satavahana iCon 2019

📍Karimnager 📅 July 14

Dr. Usha Kim

– Key note address: *Difficult situations in Ptosis*

– Chair Person for the session *Oculoplasty, Aesthetics and Oncology*

– *Genetics of Retinoblastoma*

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Events

Cutting Edge CME

📍 Aravind - Pondicherry 📅 July 13-14

The CME was inaugurated by Dr. G. Natchiar, Director-Emeritus, Aravind Eye Care System, Apart from Aravind team, the faculty included Dr. Davinder S. Grover, Glaucoma Associates of Texas, Dallas; Dr. Pradeep Y Ramulu, Wilmer Eye Institute, Baltimore; Dr. Jayant Venkatramani Iyer, Singapore National Eye Centre, Singapore; Dr. Suneeta Dubey, Shroff Charity Eye Hospital, Delhi; Dr. Vanita Pathak Ray, Centre For Sight, Hyderabad; Dr. Sirisha Senthil, LV Prasad Eye Institute, Hyderabad and Dr. Sabyasachi Sengupta.

The CME highlighted various Minimally Invasive Glaucoma Surgeries (MIGS) and Aurolab Aqueous Drainage Implantation (AADI) with didactic lectures from eminent faculty and interactive sessions. There were 4 live surgeries on MIGS and one on AADI which were highly appreciated by all. Interactive Kahoot quiz was organised and 5 top scorers were given exciting prizes. At the Innovative session named Shark Tank, the idea generators of two best innovations were awarded.

Another major highlight of the CME was the fact that it was organized in the ‘go –green way’ ensuring that the materials used could either be re-used or recycled, causing little harm to the environment.



Inauguration of Sathankulam Vision Centre

📍 Aravind - Tirunelveli 📅 July 15

Aravind’s Vision Centre at Sattankulam was inaugurated by Dr T Asirvatham Manoharan, a leading physician at Sattankulam in the presence of Dr R Ramakrishnan, Advisor, and Dr R Meenakshi, Chief Medical Officer, Aravind Eye Hospital, Tirunelveli. Several prominent persons in the community graced the occasion with their presence. From Aravind-Tirunelveli,, Dr Dideeyali Incharge – Sathankulam VC, Mr Thiruvengadam, IT Manager, Sr Arumugam, Deputy Nursing Superintendent, Sr Shanmuga Sundari, VC

Co-ordinator, Mr Balakrishnan, Free Hospital Co-ordinator, Sr Sivasankari, Opticals Incharge and Sr Pavithra, Housekeeper managed the event.

The inaugural day was so encouraging that 88 patients were examined.



Descemet’s Membrane Endothelial Keratoplasty (DMEK) workshop

📍Aravind - Madurai 📅 July 4-5

Cornea services at Aravind-Madurai organised the workshop in partnership with Sight Life. Apart from Aravind team, the faculty included Dr. Marjan Farid from The Gavin Herbert Eye Institute at The University of California, Irvine, USA; Dr. Praveen Vadavalli Krishna, Director, Tej Kohli Cornea Institute, Consultant, Refractive Surgery, Cataract, Contact Lens service L V Prasad Eye Institute, Hyderabad; Mr. Samara Andrade, Senior Director of Clinical Programs at Sight Life, Delhi; Mrs. Mridula Chettri Singh, Manager, National Distribution (India), Sight Life, Delhi and Mr. Indrajit De, Partner Accounts Manager, Sight Life, Delhi.



Research Methodology Workshop

📍Aravind - Madurai 📅 July 27

A team from Aravind Eye Hospital, Madurai consisting of Dr. Venkatesh Prajna, Director-Academics, Mr. Sanil Joseph, Senior Faculty, Ms. Kumarugurpari, Senior Librarian and Ms. Iswarya, Manager-Biostatistics participated in a one day Research Methodology Workshop organised at Preethi Institute of Medical Science, Madurai.

Accolades Aurolab Conferences attended Events LAICO Publications Statistics Training ARAVIND



Eye Donation Awareness Programme

📍Peraiyur 📅 July 24

Mr. Saravanan, Manager, Rotary Aravind International Eye Bank, Aravind Eye Hospital, Madurai handled an awareness session on eye donation, hospital cornea retrieval programme and importance of health care professionals in eye donation to the staff of Government Hospital, Peraiyur. A total of 20 persons including doctors and nurses attended the session.



Awareness Programme on Paediatric Eye Diseases

📍Aravind - Madurai 📅 June 21

Upon request from KVT school, Madurai, Aravind-Madurai organised an awareness session on eye diseases for the children of classes nine and ten. Dr. Janani spoke about the anatomy of eye. Ms. Muthulakshmi handled a session on common paediatric eye diseases. Quiz programmes and fun games related to ophthalmology were conducted to make the session lively and informative.

Excursion for Staff

📍Aravind - Tirunelveli 📅 July 21

A total of 15 male staff went on a one day tour to Black thunder, Coimbatore. The team had a wonderful time and the excursion provided the much-needed relief from the routine work schedule.



Motivational Talk

📍Aravind - Coimbatore 📅 July 13

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A motivational talk was organised on the theme “Yathumaahi Nirpaval Penn” for the newly recruited MLOPs. Ms. Suseela Moorthy, Assistant Professor, Karpagam Academy of Higher Education, Coimbatore addressed the gathering,. Staff from other Aravind centres were connected through teleconference.

On July 27, Prof (Mrs). Jayanthashree Balakrishnan gave a motivational talk to the junior MLOPs on the topic, *Ethics in daily life*. MLOPs from Madurai, Pondicherry, Tirunelveli and Theni joined through tele-conferencing. The session was highly interactive and the resource person cheerfully answered the questions from audience.



Observing Mission Day

📍Aravind 📅 July 06

13th memorial day of Aravind’s legendary founder, Dr.V was observed in all centres and Aurolab. Prayer meeting was organised where seniors shared their experiences of working with Dr. V. A video on Dr. V was screened which received wide acclaim and response from the audience.

LAICO

Eyexcel – Global

📍LAICO 📅 July 29 – August 02

LAICO organised “Eyexcel Global which was attended by 36 participant teams from 11 hospitals.



Onsite Review Meeting

📍 HV Desai Eye Hospital 📅 July 5-6

Onsite review of LAICO's partner hospitals under SCALE project was held at HV Desai Eye Hospital. A total 25 participants from 9 hospitals attended the meet.



Publications

Publications – July 2019

1. Madanagopalan VG, Karan Shah, Nagesha CK, Prabu B. **Peripheral retinal avascularity and capillary leakage in central serous chorioretinopathy.** J Curr Ophthalmol. 2019 Jun 30;31(2):220-224. [Article View](#)

- Devendra Maheshwari, Dabke S, Sindhushree R, Mohideen Abdul Kadar, Ramakrishnan R. **Clinical outcome of a nonvalved Aurolab aqueous drainage implant in posterior segment versus anterior chamber.** Indian J Ophthalmol. 2019 Aug;67(8):1303-1308. [Article View](#)
- Ashwin Segi, Siva Prasanna T, Premanand C. **Inert angle foreign body with late manifestation.** Indian J Ophthalmol. 2019 Aug;67(8):1340. [Article View](#)
- Chitaranjan Mishra, Naresh Babu K, Piyush Kohli, Kim R. **Ultra-wide field imaging of nucleus drop in vitreous.** Indian J Ophthalmol. 2019 Aug;67(8):1343. [Article View](#)
- Balamurugan S. **Commentary: Tubercular posterior scleritis – Nuances in practice!.** Indian J Ophthalmol. 2019 Aug;67(8):1366-1367. [Article View](#)
- Kirandeep Kaur, Bharat Gurnani, Prasanth Gireesh. **Hearing Loss and Decreasing Visual Acuity.** J Pediatric Ophthalmol Strabismus. 2019;56(4):212. [Article View](#)
- Shait Mohammed MR, Balamurgan MK, Amrathlal RS, Kannan P, Jayapal JM, Namperumalsamy VP, Prajna L, Dharmalingam K. **Dataset for the spore surface proteome and hydrophobin A/RodA proteoforms of A. flavus.** Data Brief. 2019 Mar 15;23:103817. [Article View](#)
- Priya S, Rajesh V, Veena K, Annamalai O, Venkatesh R, Pankaja D, Fredrick M, Shivananda N. **Barriers in utilisation of low vision assistive products.** 2019 Aug 6. [Epub] [Article View](#)
- Mano Ranjan Das, Begum Shaik M, Naveen R, Prajna NV. **Descemet Membrane Suturing for Large Descemet Membrane Detachment after Cataract Surgery.** 2019 Aug 12. [Epub] [Article View](#)
- Kumar JS, Rathinam S, Karothia D, Parida M. **Cloning, expression & evaluation of potential immunogenic recombinant capsid premembrane protein of West Nile virus.** Indian J Med Res. 2019 May;149(5):656-661. [Article View](#)
- Sharma A, Goyal A, Bilong Y, Parag K Shah, Banker A, Kumar N, Sharma R, Kuppermann BD, Bandello F. **Comparison of a Smartphone-Based Photography Method with Indirect Ophthalmoscopic Assessment in Referable Retinopathy of Prematurity: A Smart Retinopathy of Prematurity Model Pilot Study.** Ophthalmol Retina. 2019 Jun 22. [Article View](#)
- Lakshey Dudeja, Anuja J, Ishani Dudeja, Kaustubh Sane, Manohar Babu. **Observer-masked trial comparing the efficacy of topical olopatadine (0.1%), bepotastine (1.5%), and alcaftadine (0.25%) in mild to moderate allergic conjunctivitis.** Indian J Ophthalmol. 2019 Sep;67(9):1400-1404. [Article View](#)
- Naresh Babu K, Jayant Kumar, Piyush Kohli, Kim R. **Perfluoro-n-octane-assisted mega Weiss-ring technique for posterior vitreous detachment induction in retinal detachment.** Indian J Ophthalmol. 2019 Sep;67(9):1463-1465. [Article View](#)
- Renu P Rajan, Soumya Jena, Obuli Ramachandran, Piyush Kohli. **Rare cause of floaters: A motile live worm in vitreous cavity.** Indian J Ophthalmol. 2019 Sep;67(9):1490-1492. [Article View](#)
- Chitaranjan Mishra. **Commentary: Role of PASCAL and optical coherence tomography angiograpgy in the treatment of diffuse unilateral subacute neuroretinitis caused by large live motile worm.** Indian J Ophthalmol. 2019 Sep;67(9):1496-7. [Article View](#)
- Rameshkumar G, Sikha M, Ponlakshmi M, Selva Pandiyan A, Lalitha P. **A rare case of Myrothecium species causing mycotic keratitis: Diagnosis and management.** Med Mycol Case Rep. 2019 Jul;25:53-55. [Article View](#)

Statistics

Patient Monthly Statistics

July – 2019														
Hospitals	Madurai	Theni	Tirunelveli	Coimbatore	Pondicherry	Dindigul	Tirupur	Salem	Udumalpet	Tuticorin	CbeCC	Chennai	Tirupati	Total
HOSPITAL OUT-PATIENT VISITS														
Paying (New & Review)	63822	9163	30524	35274	28474	7314	4591	13132	3986	5530	3765	17399	8120	231094
Free:Direct walk-in (New & Review)	20721	2534	8407	12553	11692	—	1428	2311	2420	1191	—	4317	3218	70792

OUTREACH OUT PATIENT														
Comprehensive Eye Camps	9748	1336	4850	9996	7889	Accolades —	Audlab 374	1144	Conferences attended 320	Events 269	LAICO —	Publications 2222	908	Statistics 39056
Diabetic Retinopathy camps	1350	244	272	865	488	—	—	—	—	—	—	—	—	3219
Glaucoma Camps	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refraction Camps	588	—	574	780	528	—	—	318	739	80	—	—	—	3607
Mobile Refraction Unit	—	219	—	1223	—	—	—	—	—	—	—	—	—	1442
School Screening camps	6497	247	556	135	4608	—	383	362	—	—	—	195	—	12983
Paediatric Camps	—	150	—	—	758	—	—	—	—	—	—	—	—	908
RoP	185	153	138	484	57	—	—	—	—	—	—	7	—	1024
Vision Centres	26689	6253	13994	4835	8908	—	1289	—	—	—	—	—	—	61969
Community Centres / City Centres	9561	2093	2876	—	2921	—	—	—	—	—	—	—	—	17451
Total OP Examinations	139161	22392	62191	66145	66323	7314	8065	17267	7465	7070	3765	24140	12246	443544
Total Number of Camps	36	8	26	34	29	—	2	7	2	2	—	10	4	160
SURGERIES														
Service Proportion of Cataract Surgeries														
Paying	4061	518	1451	1750	1722	387	264	701	253	220	171	923	711	13132
Free (Direct)	4161	348	977	1786	1247	164	199	328	426	210	—	402	415	10663
Camp	3656	268	1580	3122	2928	—	63	397	104	17	—	412	178	12725
Total Cataract Surgeries	11878	1134	4008	6658	5897	551	526	1426	783	447	171	1737	1304	36520
Note: NA – Not Applicable														

July – 2019			Accolades	Aurolab	Conferences attended	Events	LAICO	Publications	Statistics	Training	ARAVIND
Course title	Training Centre	No. of enrolments									
LONG TERM FELLOWSHIP PROGRAMMES – FOR OPHTHALMOLOGISTS											
Fellowship in Anterior Segment / Intraocular Lens Surgery	Coimbatore	1									
	Tirupati	2									
Fellowship in Cornea	Coimbatore	1									
	Pondicherry	1									
	Madurai	1									
	Tirunelveli	1									
Fellowship in General Ophthalmology	Coimbatore	1									
	Madurai	1									
	Pondicherry	1									
Fellowship in Glaucoma	Coimbatore	1									
	Tirunelveli	1									
Fellowship in Paediatric Ophthalmology	Madurai	1									
Fellowship in Retina Vitreous	Tirunelveli	2									
SHORT TERM CLINICAL COURSES – FOR OPHTHALMOLOGISTS											
Clinical Observership Program In Diagnosis and Management Of Glaucoma	Madurai	2									
	Tirunelveli	2									
Management of Retinopathy of Prematurity and Paediatric Retinal Disorders	Madurai	1									
	Coimbatore	1									
Lasers in Diabetic Retinopathy	Madurai	3									
Small incision cataract surgery	Madurai	1									
	Coimbatore	1									
PARAMEDICAL COURSES											
Training for Ocularist	Madurai	1									
COMMUNITY OUTREACH COURSE											
Community Outreach and Social Marketing of Eye Care Services	LAICO	9									
INSTRUMENT MAINTENANCE COURSE											
Instrument Maintenance – For Technicians	LAICO	5									