



ARVO-INDIA

Indian Eye Research Group

October 7-10, 2021 (Virtual)

THURSDAY, OCTOBER 7, 2021

DAY 1

Sessions	Time	Hall 1	Hall 2	Hall 3	Hall 4	E-Poster Hall
Workshops	10.00 - 12.00	Workshop 1 Arkasubhra Ghosh <i>Ocular gene therapy</i>	Workshop 2 T Velpandian <i>Ocular pharmacology</i>			
Inauguration	17.30 - 17.35	Welcome address: Prashant Garg				
	17.35 - 17.45	ARVO India - IERG Reminiscence: Gullapalli N Rao				
	17.45 - 18.00	ARVO during the pandemic and beyond: Iris M Rush				
Session Chairs		Periasamy Sundaresan Sarangapani Sripriya	Srinivasan Senthil Kumari K Aruna Sri	Javed Ali Mudit Tyagi	PremNandhini Satgunam Pavan K Verkicharla	
Free Papers	18.00 - 18.08	BSO1 Goutham Pyatla <i>Involvement of GLIS1 in the pathogenesis of primary congenital glaucoma</i>	BSO7 Gowtham Lakshminarayanan <i>Untargeted metabolomic investigation of glaucomatous patients using high resolution mass spectrometry</i>	CLO1 Tanvi Mudgil <i>Longitudinal changes in corneal epithelial thickness and reflectivity following simple limbal epithelial transplantation: an optical coherence tomography-based study</i>	OPO1 Satish Kumar Gupta <i>Does relative peripheral defocus alter the corresponding peripheral retinal electrical signals?</i>	
	18.08-18.16	BSO2 Harshavardhini G <i>A spectrum of candidate and mitochondrial gene mutations in Usher syndrome patients from India</i>	BSO8 Nikhala Shree S <i>Anti-glaucoma medications lowered decorin and altered profibrotic proteins in human tenon's fibroblast</i>	CLO2 Tapas R. Padhi <i>Retinopathy of prematurity of half zone: Clinical profile and outcome</i>	OPO2 Rahul Negi <i>The grade of relative afferent pupillary defect is dependent on intensity of light stimulation of the pupils</i>	
	18.16-18.24	BSO3 Pooja Khamar <i>Status of SARS-CoV-2 specific pro & anti-viral genes on the ocular surface</i>	BSO9 Pon Yazhine T S <i>Exoproteome of clinical isolates of Fusarium solani</i>	CLO3 Sharon D'Souza <i>Classification of ocular surface pain based on discordant signs and symptoms: association of clinical, confocal imaging and tear molecular profiles</i>	OPO3 Preetam Kumar <i>Perception of suprathreshold contrast in keratoconus</i>	
	18.24-18.32	BSO4 Prerna Kulshrestha <i>Global microRNA profiling for understanding the pathogenesis of non-infectious uveitis</i>	BSO10 Ramaraj Kannan <i>Untargeted metabolomics analysis of aqueous humour in fuchs endothelial corneal dystrophy identifies unique signaling modules</i>	CLO4 Saumya Srivastav <i>Non-invasive tear film and meibomian gland assessment in healthy Indian population: effect of age, gender and interparametric relationship</i>	OPO4 Prayag Bellur Shashikumar <i>Visualisation of corneal opacity score through a multi axis wheel diagram</i>	
	18.32-18.40	BSO5 Srikrupa Natarajan <i>Whole exome sequencing identifies SLC6A6 as novel candidate gene in leber congenital amaurosis</i>	BSO11 Rebecca Manohar <i>Elastin interacting partners are differentially expressed in pseudoexfoliation syndrome</i>	CLO5 Divya Sree Ramya Achanta <i>Corneal endothelial cell alterations in variants of Axenfeld-riege syndrome assessed by specular microscopy</i>	OPO5 Chandrika Ravisankar <i>Fluctuations of steady-state accommodation is a marker for screening spasm of near reflex</i>	
	18.40-18.48	BSO6 Swathi Chadalawada <i>Dysregulated expression of micro RNAs in vitreous humour from intra-ocular tuberculosis patients</i>	BSO12 Saumya Srivastava <i>Identification of antigenic protein of Acanthamoeba castellanii for the diagnosis of acanthamoeba keratitis</i>	CLO6 Deepanjan Datta <i>Microneedle contact lens for ocular delivery of Cyclosporine A</i>	OPO6 Aiswaryah Radhakrishnan <i>Objective and subjective changes in color discrimination with and without underwater blur</i>	
	Discussion	18.48-19.00	Q & A	Q & A	Q & A	Q & A
	19.00 - 19.10	Break				
Keynotes* Chairs: Rohit C Khanna Soumyava Basu	19.10-19.30	Keynote 1 Nathan Congdon <i>ENGINE: Research documenting how vision care can accelerate progress towards the SDGs across the life course</i>				
	19.30-19.50	Keynote 2 Anat Galor <i>What's new in the world of dry eyes?</i>				
Oration* Chair: Ronnie George	19.50 - 20.50	SS Badrinath Oration Usha Chakravarthy <i>The early detection of neovascular AMD and what has the EDNA study taught us</i>				

All Posters

* All the Keynotes & Orations will be in Hall-1

Sessions	Time	Hall 1	Hall 2	Hall 3	Hall 4	E-Poster Hall
Workshops	10.00 - 12.00	Workshop 3 Vivek Singh, Abhinav Kethiri <i>Animal models in eye research</i>	Workshop 4 K Dharmalingam <i>Ocular proteomics</i>			
	Session Chairs	Indumathi Mariappan Sinnakaruppan Mathavan	Mamatha Reddy Ayyasamy Vanniarajan	Charanya Ramachandran Sunita Chaurasia	Shrikant Bharadwaj Srinivas Marmamula	
	17.30 – 17.38	BSO13 Akhil Varshney <i>Toxicity of endogenous cytoplasmic Alu complementary DNA in age-related macular degeneration</i>	BSO19 Janavi Subramani <i>Retinal pigment epithelium (RPE) cells generated from oculocutaneous albinism type IA (OCA1A) patient-derived induced pluripotent stem cell (iPSC) line mimics disease phenotype of pigmentation defects</i>	CLO7 Ashik Mohamed <i>Effect of topical rho-associated kinase inhibitor ripasudil 0.4% on corneal endothelium</i>	OPO7 Rebecca Sumalini <i>How does vision correlate with overall development in children with cerebral visual impairment?</i>	
	17.38-17.46	BSO14 Ankit Jain <i>Heterogeneity using novel invariant gene expression analysis and lipidomics in retinoblastoma</i>	BSO20 Radhika Manukonda <i>Isolation and characterization of serum derived extracellular vesicles from retinoblastoma patients</i>	CLO8 Himanshu Gururani <i>A study on corneal birefringence behavior using digital photoelasticity</i>	OPO8 Rajashekar Varada <i>Who is paying for cataract surgery of elderly in rural Telangana?</i>	
	17.46-17.54	BSO15 Barathi Lenin <i>In silico identification of putative alternatives to ocular chemotherapeutic agents: high-throughput virtual screening and molecular dynamics studies of natural product inhibitors targeting human DNA topoisomerase II beta</i>	BSO21 Ramyra Ravi <i>Paraoxonase 2 protects against the cml mediated mitochondrial dysfunction through modulating JNK signalling pathway in human retinal microvascular endothelial cells</i>	CLO9 Kavitha A V <i>A pilot study on comparative analysis of minimum inhibitory concentration (MIC) and mutant prevention concentration (MPC) of conjunctival bacterial isolate to fluoroquinolones</i>	OPO9 Vijitha S Vempuluru <i>Photo-screening for early detection of retinoblastoma: a proof of concept study</i>	
Free Papers	17.54-18.02	BSO16 Deepak Kumar Sahel <i>CRISPR/Cas9 nanomedicine therapy for the management of wet-age related macular degeneration</i>	BSO22 Revu VL Narayana <i>Generation and characterization of drug resistant clones of RB Y79 cells</i>	CLO10 Lalit Kishore Ahirwar <i>Elucidating the clinical, microbiological and molecular diagnostic aspects of Macrophomina phaseolina keratitis</i>	OPO10 Vijaya Kumari Gothwal <i>Life in lockdown: impact of COVID-19 lockdown measures on the lives of school-age children and their families in India</i>	
	18.02-18.10	BSO17 Ravinarayanan Haribalaganesh <i>Genome-wide transcriptome profiling of glucocorticoid responder and non responder primary human trabecular meshwork cells using RNA-sequencing after dexamethasone treatment</i>	BSO23 Sumaiya Sirajudeen <i>Differential response of corneal epithelial and stromal cells to the novel chemical cross-linker treatment</i>	CLO11 Subhpreet Kaur <i>Comparison of two corneal epithelial cell lines in respect of their expression of differentiation and stemness markers</i>	OPO11 Samir Sutar <i>The SPA-VVRT (smart phone anaglyph video virtual reality therapy) study- a pilot non-randomized trial of smart phone anaglyph video virtual reality based therapy for treatment of amblyopia in adults</i>	
	18.10-18.18	BSO18 Tapas Kumar Roy <i>Enhanced stability of sodium ascorbate for ocular emergency by using TRAN-SRECON™</i>	BSO24 Susan Immanuel <i>Isolation and characterisation of exosome mimetics from human corneal epithelial cells</i>	CLO12 Swati Singh <i>Prostaglandin E receptor subtype 3 expression in lacrimal glands of healthy subjects, Stevens-Johnson syndrome and non-specific dacryoadenitis</i>	OPO12 Sai Naga Sri Harsha Ch <i>Tearing mode fracture toughness of cornea</i>	
Discussion	18.18-18.30	Q & A	Q & A	Q & A	Q & A	
Keynotes* Chairs: Inderjeet Kaur N Angyarkanni	18.30–18.50	Keynote 3 Bikash R Pattnaik <i>A vision for the future is the treatment for ion channelopathies</i>				
	18.50-19.10	Keynote 4 Renu Kowluru <i>Diabetic Retinopathy: Mitochondria in a Web of Epigenetics</i>				
	19.10 - 19.20	Break				
	19.20 - 19.40	Keynote 5 Manni Luthra-Guptasarma <i>Development of tools to explore amelioration of ocular diseases through the manipulation of components of the extracellular matrix</i>				
Oration* Chair: Raja Narayanan	19.40 - 20.40	D.Balasubramanian Oration Miguel Seabra <i>From gene identification to gene therapy in 20 years: the Choroideremia example</i>				

Sessions	Time	Hall 1	Hall 2	Hall 3	Hall 4	E-Poster Hall
Keynotes* Chairs: Sanhita Roy G Chidambaranathan	9.30 - 9.50	Keynote 6 Eric Pearlman <i>Fungal and bacterial keratitis – new insights into pathogenesis</i>				All Posters
	9.50 - 10.10	Keynote 7 Aparna Lakkaraju <i>Live imaging reveals novel insights into macular degenerations</i>				
	10.10 - 10.30	Keynote 8 Taraprasad Das <i>Application of bed-side and bench research in the advancement of endophthalmitis care</i>				
Oration* Chair: Savitri Sharma	10.30 - 11.30	Bireswar Chakrabarti Oration Fiona Stapleton <i>Global Epidemiology of Infectious Keratitis</i>				
	11.30 - 11.40	Break				
Free Papers	Session Chairs	Chitra Kannabiran Bhavani S Kowtharapu	J Jeya Maheshwari G Kumaramanickavel	Swathi Kaliki Bhavik Panchal	Vivek Dave Aparna Rao	
	11.40 – 11.48	BSO25 Keya Katara <i>BCAT1 regulates metabolic flux in retinoblastoma abetting tumor growth</i>	BSO31 Animith Venuganti <i>Evaluating the potential of a biomimetic decellularized matrix (DCM) hydrogel in preventing corneal scarring in an animal model</i>	CLO13 Komal Agarwal <i>Clinical profile and treatment outcomes of infants with exudative retinal detachment as the presenting feature in retinopathy of prematurity</i>	CLO19 Deepika C Parameswarappa <i>Clinical characteristics of comorbid retinal dystrophies and primary angle closure disease</i>	
	11.48-11.56	BSO26 Archana Padmanabhan Nair <i>Intraocular immune profile of dry AMD: a vision for now and future</i>	BSO32 Ashu Shukla <i>Exploring the role of domain variants of fibronectin type III repeats of TENASCIN-C (Tn fnIII) in corneal wound healing—an in-vitro study</i>	CLO14 Manisha Malani <i>Artificial intelligence in predicting the drug-transporter interaction: understanding the entry of systemic drugs into eye</i>	CLO20 Dhivya Ashok Kumar <i>Semilunar sign of scleritis in cornea</i>	
	11.56-12.04	BSO27 Apurwa P Samarath <i>Characterization of type 2 secretion system (T2SS) in ocular clinical isolates of Pseudomonas aeruginosa keratitis</i>	BSO33 Athira Ramesh <i>PIWI/piRNA as a possible interactant in neurons for light perception and sleep cycle</i>	CLO15 Sameera Nayak <i>Sight threatening intraocular infection after hospital discharge for Covid-19 treatment in south India</i>	CLO21 Tarjani V Dave <i>Choroidal vascularity index in thyroid eye disease: comparison with controls and application in diagnosing non-inflammatory active disease</i>	
	12.04-12.12	BSO28 Angayarkanni Narayana-samy <i>Metabolites relevant to pathogenesis of AMD impair phagocytosis machinery in the ARPE-19 cells: mitigating effect of active principles</i>	BSO34 Divya Gopal <i>Synthesizing and characterizing novel peptide as a cargo for targeting human tenon fibroblast cells to modulate the fibrosis</i>	CLO16 Swathi Kaliki <i>Artificial intelligence and machine learning in ocular oncology: Retinoblastoma</i>	CLO22 Gazal Patnaik <i>Clinical profile and histopathological correlation in patients with sympathetic ophthalmia – a 28 years study from a tertiary eye care center in South India</i>	
	12.12-12.20	BSO29 Sujithra Shankar <i>Novel corneal targeting cell penetrating peptide for management of corneal diseases and disorders</i>	BSO35 Iswarya Radhakrishnan <i>Transplanted trabecular meshwork (TM) stem cells home to TM</i>	CLO17 Vishal Raval <i>Macular Retinoblastoma: clinical presentation and treatment outcomes</i>	CLO23 Gunjan Sharma <i>Intraocular immune response in different ocular TB presentations</i>	
	12.20-12.28	BSO30 Sruthi Priya M <i>Effect of neddylation inhibition by MLN4924 on hypoxia induced retinal angiogenesis</i>	BSO36 Ujjalkumar Subhash Das <i>Bio-intelligence in predicting tear penetration using QSPR approach</i>	CLO18 Vivek Pravin Dave <i>Application and validation of a novel inflammatory score in the clinical grading of infectious endophthalmitis: the endophthalmitis management study – Report 2</i>	CLO24 Raja Narayanan <i>Indian health outcomes, public health and economics research centre</i>	
Discussion	12.28-12.40	Q & A	Q & A	Q & A	Q & A	
iQUEST*	14.00 -15.00	iQUEST (IERG Quiz competition) Co-ordinators: Anthony Vipin Das & Joveeta Joseph				
Sponsor's Talk*	15.00 -16.00	Technological advances				

* All the keynotes, Orations, iQUEST & Sponsor's Talk will be in Hall-1

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Best of ARVO-India*	17.30 -18.00	Best of Vision Research Foundation, Sankara Nethralaya Moderator: Ronnie George				All Posters
	18.00 -18.30	Best of Aravind Medical Research Foundation, Dr G Venkataswamy Eye Research Institute Moderator: Kuppamuthu Dharmalingam				
	18.30 -19.00	Best of Dr Rajendra Prasad Centre for Ophthalmic Sciences, All India Institute of Medical Sciences Moderator: Thirumurthy Velpandian				
	19.00 - 19.10	Break				
Best of ARVO-India*	19.10 - 19.40	Best of Narayana Nethralaya Foundation, Narayana Nethralaya Moderator: Arkasubhra Ghosh				
	19.40 - 20.10	Best of Prof. Brien Holden Eye Research Centre, Hyderabad Eye Research Foundation, L V Prasad Eye Institute Moderator: Sayan Basu				
Valedictory*	20.10 - 20.20	27 years of Vision Research Dorairajan Balasubramanian				
	20.20 - 20.35	Final words Prashant Garg Ronnie George Kuppamuthu Dharmalingam				
	20.35 - 20.40	Vote of thanks Subhabrata Chakrabarti				

* All the sessions will be in Hall-1