SELECTED RECENT PUBLICATIONS

1) **Mecp2^{270} mutant protein is expressed in astrocytes as well as in neurons and localizes into the nucleus.**
Kifayathullah LA*, Arunachalam JP*, Bodda C*, Agbemenyah HY, Laccone FA, Mannan AU.
Cytogenet Genome Res. 2010;129 (4):290-7. doi: 10.1159/000315906. Epub 2010 Jul 8. *First authors equally contributed.

2) **Mild overexpression of Mecp2 in mice causes a higher susceptibility toward seizures.**
Bodda C, Tantra M, Mollajew R, Arunachalam JP, Laccone FA, Can K, Rosenberger A, Mironov SL, Ehrenreich H, Mannan AU.
Am J Pathol. 2013 Jul;183 (1):195-210. doi: 10.1016/j.ajpath.2013.03.019. Epub 2013 May 15.

3) **Next-generation sequencing technology detects deletions in the RB1 gene, ranging from a single basepair to whole gene (~170 kb) with a higher sensitivity than FISH.**
Ashraf UM, Smita A, Arunachalam JP, Rupali G, Ravi R, Satish S, Vamsi V,Preveen R, Kas S, and Ramesh H.
J Mol Diagn. 2014 Nov; (Abstract)

4) **Prenatal genetic diagnosis of retinoblastoma and report of RB1 gene mutation from India.**
Shah PK, Sripriya S, Narendran V, Pandian AJ.
Ophthalmic Genet. 2016 Feb 25:1-4.

5) **Phenotypic characterization of X-linked Retinoschisis: Clinical, Electroretinography and Optical coherence tomography variables.**
Srividya N, Sudha D, Arunachalam JP, Rajiv R.
Paper accepted in *Indian Journal of Ophthalmology* (IJO_602_15R6)

6) **Next generation sequencing based method shows increased mutation detection sensitivity in an Indian retinoblastoma cohort**
Jaya S, Avshesh M, Arunachalam JP, Ashwin CM, Sripriya S, Suman K, Smita A, Satish S, Shanmukh K, Vamsi V, Ramesh H, Kalyanasundaram S, Ashraf UM
Paper accepted in *Molecular Vision* (2016MOLVIS0200).

7) **Genetic studies in a patient with X-Linked Retinoschisis coexisting with Developmental Delay and Sensorineural Hearing Loss.**
Sudha D, Irene R, Aparna G, Smitha A, Shuba K, Srividya N, Sripriya S, Praveen S, Subbulakshmi C and Arunachalam JP.
Paper accepted in Ophthalmic Genetics (DOI: 10.1080/13816810.2016.1214972) as corresponding author.

MANUSCRIPTS UNDER REVIEW

1) **A novel therapeutic approach by TAT-MeCP2 protein delivery prolongs the lifespan and rescues neuronal damage in a mouse model of Rett syndrome.**
Prakasha K, Arunachalam JP, Ralf D, Marco P, Wolfgang E and Franco LA.
(*Reviewed and resubmitted to Nature Medicine-Manuscript# NMED: BC29956A*. *Presently manuscript under review in journal Brain, #BRAIN-00554*)

2) **HIWI2 regulates tight junction proteins in retinal pigment epithelial cells through modulation of AKT/GSK3 signaling pathway.**
Suganya S, Karthikka P, Aditya V, Arunachalam JP, Subbulakshmi C**.**
(*Manuscript submitted to 'PLoS ONE', #PONE-D-16-13976)*

3) **Differing severity among Retinoschisis patients encompassing nonsecreted mutant profile Retinoschisin gene mutants: An insight into the localization of mutant retinoschisin to the plasma membrane of the cell.**
Sudha D, Srividya N, Muthukumaran S, Al Ameen M, Umashankar V, Lingam G, Vikas K, Rajiv R, Subbulakshmi C and Arunachalam JP
(*Manuscript to 'Nature Scientific Reports' as Corresponding Author)*

4) **Proteomic profiling of human intraschisis cavity fluid.**
(Manuscript to 'Journal of Proteome Research' as Corresponding Author)

5) **NDP whole gene deletion in a patient with Norrie Disease.**
(Manuscript to 'European Journal of Medical Genetics' as Corresponding Author)

CHAPTERS IN BOOKS / REVIEW ARTICLE

1) Chapter titled '**Diagnostic procedures for Genetically Transmitted Eye Diseases**'
Sudha D and *Jayamuruga Pandian A*
in the book, 'Diagnostic Procedure in Ophthalmology (III edition)' edited by Dr.HV Nema and published *by Jaypee Brothers Medical Publisher. (ISBN number: 978-93-5090-852-5)*

2) Chapter titled '**Molecular genetic testing in ophthalmology**'
Soumittra N, Sripriya S and *Jayamuruga Pandian A*
in INSIGHT periodical *Sci J Med & Vis Res Foun October 2013; XXXI:46–49*

3) Chapter entitled '**Current research Perspectives in Understanding Diabetic Retinopathy**'
Jayamuruga Pandian A, Soumittra N, Rajiv R, Sripriya S
in the book, Genetic Eye Research in Asia, as a part of springer series, Essentials in Ophthalmology.

4) Review article entitled, '**Strategies for gene mapping in inherited ophthalmic diseases**'
Srilekha S, Bhavana S, Divya M R, Sudha D, Sathya Priya C, *Jayamuruga Pandian Arunachalam*, Soumittra N, Sripriya S
in the Asia-Pacific Journal of Ophthalmology (APJO) [official publication of the Asia-Pacific Academy of Ophthalmology (APAO)] special Issue on Eye Genetics and Gene Therapy, 5.4, Jul 2016.

ORAL / POSTER PRESENTATIONS

06/2015	Invited talk on, "Genetic Engineering and Functional Characterization of *RS1* Gene and its mutants implicated in X-Linked Retinoschisis (XLRS)" in Continual Medical Eduction (CME) program and Genomics Workshop entitled 'Genomics: Personalized and Precision Medicine' organized by Frontier Mediville (a unit of Frontier Lifeline hospital), Gummudipoondi, **India**
03/2015	Invited talk on, "Molecular study of *RS1* Gene and its mutants implicated in X-Linked Retinoschisis (XLRS)" in Indian Genetic Congress held at SRM University, Chennai, **India**
2014	Invited talk on, "Functional Characterization of *RS1* Gene and its mutants implicated in X-Linked Retinoschisis (XLRS)" in Indian Eye Research Group (IERG) - Association for Research in Vision and Ophthalmology (ARVO), **USA** [IERG-ARVO] India Chapter 21st Annual Meeting held at L V Prasad Eye Institute, Hyderabad, **India**
2014	Invited talk on, "Engineering and Functional Characterization of genes involved in inherited eye diseases: A significant approach" in international Indo-UK conference & workshop on 'Ophthalmic Genetics and Genetic Counselling for Clinicians and Basic Scientists' conducted at Narayana Nethralaya hospital, Bangalore, **India** in association with the Cardiff University and University of South Wales, **UK**
2014	17th ADNAT international Convention on, 'Genomics in Personalized Medicine and Public Health' at Rajiv Gandhi Center for Biotechnology (RGCB), Trivandrum, **India**

2013	Oral presentation entitled, "Ocular Gene therapeutics: An update" in 1st 'SN GENETiCS annual national symposium and Continual Medical Eduction (CME) program on 'Genetic counseling and Gene testing' at Vision Research Foundation, Sankara Nethralaya, Chennai, **India**
2012	Oral presentation entitled, "Molecular Diagnostics: From Gene to Disease" in CME program sponsored by Johnson and Johnson pharmaceuticals conducted at Vision Research Foundation, Chennai, **India**
2011	Asia-ARVO (Association for Research in Vision and Ophthalmology) 2011 international conference organized by Singapore Eye Research Institute (SERI), **Singapore**
2010	'Diabetic Retinopathy from Bench to Population' international conference organized by Sankara Nethralaya, Chennai, **India**
2008	'HD2008: The Milton Wexler celebration of Life' international conference organized by Hereditary Disease Foundation (HDF), Boston, **USA**
2008	'Cellular Responses to DNA Damage' international conference organized by Abcam, Boston, **USA**
2007	11th Annual Coalition/Scientific HDSA meeting on Huntington's Disease, Wakefield, **USA**
2007	ChIP-on-chip scientific meeting by Affymetrix, Boston, **USA**
2006	'American Society of Human Genetics (ASHG)' annual meeting and international conference, New Orleans, **USA**
2005	DFG (German Research Council) Center for Molecular Physiology of the Brain (CMPB) meeting, Eschwege, **Germany**
2004 – 2006	I, II, III International PhD student symposium, 'Horizons in Molecular Biology' by Max Planck Research School, Goettingen, **Germany**
2001	XXV All India Cell Biology conference and satellite symposium on cell growth and death held at Indian Institute of Sciences, Bangalore, **India**