


Prof Govindasamy Kumaramanickavel, MD (brief CV)

	<p>Nationality : Indian, Asian</p> <p>Family : Wife (Padmini) & Sons (Siddhanth, Veddhanth)</p> <p>Mob : +91 9840810458</p> <p>Email : gkumarmvel@gmail.com</p>
<p>Current Position</p>	<p>Research Director - Narayana Nethralaya, Bangalore, India.</p>
<p>Visiting and Former Positions</p>	<p>A) Visiting Associate: Ophthalmic Genetics & Clinical Services Branch, National Eye Institute, NIH, USA.</p> <p>B) Visiting Professor: (i) Sri Ramachandra University, Chennai, India, (ii) Adichunchanagiri Institute of Medical Sciences, Adichunchanagiri University, Javarana Hally, Karnataka, India, (iii) Hong Kong Eye Hospital, Hong Kong.</p> <p>C) Formerly: (i) Deputy Director of Research, Professor of Genetics & Molecular Biology, Executive Officer (Medical), Sankara Nethralaya, India, (ii) Research Fellow, Department of Biochemistry, University of Otago, Dunedin, New Zealand.</p>
<p>Profile - Summary:</p> <p>Prof Kumaramanickavel works on ocular genomics - primarily involved in gene mapping, mutational screening and association studies including genomewide in complex and Mendelian ophthalmic diseases. Was involved in glaucoma, diabetic retinopathy and pediatric epidemiological and genetic projects comprising of 35,000 subjects. Was a key member of a successful ocular gene mapping team at New Zealand, that discovered the RPE65 gene. Later, joined the Department of Genetics at Sankara Nethralaya, India and worked for over a decade and where he was elevated as executive officer (Medical) and Deputy Director of Research. He was also the Director of Research at the Aditya Jyot Eye Hospital, Mumbai, India. He has done genetic counseling for over 15,000 patients and teaches medical and ophthalmic genetics. He graduated in medicine (MBBS) from the University of Madras, Madras Medical College, India and subsequently graduated in MD (Physiology). As Fogarty Visiting Associate, Dr. James Fielding Hejtmancik trained him in the Ophthalmic Genetics & Clinical Services branch, National Eye Institute, National Institute of Health, USA. He was Research Fellow, Ocular Gene Mapping Laboratory, Department of Biochemistry, University of Otago, New Zealand, where Dr. Michael John Denton trained him. During the same period at Otago, Dr. Robert F Mueller trained him in genetic counseling. Currently he is the Research Director at the premier ophthalmic institution of India – Narayana Nethralaya, Bangalore. He is a visiting faculty at the National Eye Institute, USA; Hong Kong Eye Hospital, Hong Kong and several universities in India and abroad. He has received funding for research projects from DBT, DST, ICMR, CSIR (all Government of India departments), National Institutes of Health, USA, INSERM, France and other private funding agencies. He has over 130 peer-reviewed publications including articles in <i>Nature Genetics</i>. He is a recognized PhD guide in various universities in India and across the world.</p>	

Research

He has been working in basic sciences, translational, clinical, and epidemiological research in ophthalmology. In basic sciences, he has been working in ocular genomics for the past three decades. He is primarily involved in gene mapping, mutational screening and association studies including genome wide in complex (*diabetic retinopathy, age-related macular degeneration, myopia, open angle and angle closure glaucomas*) and Mendelian (*corneal dystrophies, Seathre-Chatzen syndrome, Keratoconus, Foveal Hypoplasia, Nance-Horan syndrome, retinal degenerations, retinoblastoma*) ophthalmic diseases and molecular diagnostics. Was involved in four major (*glaucoma, diabetic retinopathy and childhood blindness*) epidemiological and genetic projects comprising of 35,000 subjects at Sankara Nethralaya, Aditya Jyot Eye Hospital and Narayana Nethralaya. He has been facilitating cross-faculty integration and networking of clinicians, epidemiologists, sociologists, and vision scientists. He has been involved in genetic counseling of patients with genetic diseases and has experience in bringing bedside-to-bench-to-bedside practice. Teaches human genetics for medical, paramedical and research staff and students in India and abroad.

Clinical & Administration

Presently he directs the basic science research activities at Narayana Nethralaya, Bangalore, India. He was managing the department of genetics at Sankara Nethralaya, with more than 20 staff members for 12 years. He was also managing epidemiology and genetics projects administration and logistics of glaucoma project with 10 staff members and in diabetic retinopathy project with 30 personnel. He was the executive officer (medical) at Sankara Nethralaya (with a staff about 1000 members) and had experience in hospital and research administrations. Had collaborated and published with scientists in India, Singapore, United States of America, Canada, United Kingdom, France, Germany, Hong Kong, Australia, and New Zealand. He has been member of the program advisory council of the Department of Science and Technology, Government of India, reviewing scientific projects of the country for the past 6 years. He was also the member of the governing body of the Indian Council of Medical Research. He is now on a mission to persuade ophthalmologists to undertake PhD and do research and wants to create many genetics and medical research centers in India and Asia. He has organized several national and international scientific conferences. Was involved in ISO and NABL activities.

Publications (selected): Papers: 130, Books: 5

Citation Index (Jun 2023):

Citation Indices	All	Since 2018
Citations	6447	2220
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1: Gopinath C, Rompicherla R, Mathias GP, Patil R, Poornachandra B, Vinekar A, Mochi TB, Braganza S, Shetty KB, Kumaramanickavel G, Ghosh A. Inherited retinal

disorders: a genotype-phenotype correlation in an Indian cohort and the importance of genetic testing and genetic counselling. *Graefes Arch Clin Exp Ophthalmol*. 2023 Jan 17. doi: 10.1007/s00417-022-05955-5. Epub ahead of print. PMID: 36648511.

2: Hui EKY, Yam JCS, Rahman F, Pang CP, Kumaramanickavel G. Ophthalmic genetic counselling: emerging trends in practice perspectives in Asia. *J Community Genet*. 2023 Feb;14(1):81-89. doi: 10.1007/s12687-022-00616-w. Epub 2022 Nov 2. PMID: 36322374; PMCID: PMC9947206.

5: Gupta H, Malaichamy S, Mallipatna A, Murugan S, Jeyabalan N, Suresh Babu V, Ghosh A, Ghosh A, Santhosh S, Seshagiri S, Ramprasad VL, Kumaramanickavel G. Retinoblastoma genetics screening and clinical management. *BMC Med Genomics*. 2021 Jul 22;14(1):188. doi: 10.1186/s12920-021-01034-6. PMID: 34294096; PMCID: PMC8296631.

6: Raj P, Tejwani S, Sudha D, Muthu Narayanan B, Thangapandi C, Das S, Somasekar J, Mangalapudi S, Kumar D, Pindipappanahalli N, Shetty R, Ghosh A, Kumaramanickavel G, Chaudhuri A, Soumitra N. Ophthatome™: an integrated knowledgebase of ophthalmic diseases for translating vision research into the clinic. *BMC Ophthalmol*. 2020 Nov 10;20(1):442. doi: 10.1186/s12886-020-01705-5. PMID: 33172432; PMCID: PMC7656766.

7: Murugeswari P, Firoz A, Murali S, Vinekar A, Krishna L, Anandula VR, Jeyabalan N, Chevour P, Jayadev C, Shetty R, Carpentier G, Kumaramanickavel G, Ghosh A, Das D. Vitamin-D3 (α -1, 25(OH) 2D3) Protects Retinal Pigment Epithelium From Hyperoxic Insults. *Invest Ophthalmol Vis Sci*. 2020 Feb 7;61(2):4. doi: 10.1167/iovs.61.2.4. PMID: 32031576; PMCID: PMC7325624.

8: Katakia YT, Duddu S, S N, Kumar P, Rahman F, Kumaramanickavel G, Chatterjee S. Ex vivo model for studying endothelial tip cells: Revisiting the classical aortic-ring assay. *Microvasc Res*. 2020 Mar;128:103939. doi: 10.1016/j.mvr.2019.103939. Epub 2019 Oct 30. PMID: 31676309.

9: Sivakumaran TA, Igo RP Jr, Kidd JM, Itsara A, Kopplin LJ, Chen W, Hagstrom SA, Peachey NS, Francis PJ, Klein ML, Chew EY, Ramprasad VL, Tay WT, Mitchell P, Seielstad M, Stambolian DE, Edwards AO, Lee KE, Leontiev DV, Jun G, Wang Y, Tian L, Qiu F, Henning AK, LaFramboise T, Sen P, Aarthi M, George R, Raman R, Das MK, Vijaya L, Kumaramanickavel G, Wong TY, Swaroop A, Abecasis GR, Klein R, Klein BEK, Nickerson DA, Eichler EE, Iyengar SK. Correction: A 32 kb Critical Region Excluding Y402H in CFH Mediates Risk for Age-Related Macular Degeneration. *PLoS One*. 2018 Dec 20;13(12):e0209943. doi: 10.1371/journal.pone.0209943. Erratum for: *PLoS One*. 2011;6(10):e25598. PMID: 30571798; PMCID: PMC6301675.

10: Kemmanu V, Giliyar SK, Rao HL, Shetty BK, Kumaramanickavel G, McCarty CA. Consanguinity and its association with visual impairment in southern India: the

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11: Kemmanu V, Giliyar SK, Shetty BK, Singh AK, Kumaramanickavel G, McCarty CA. Emerging trends in childhood blindness and ocular morbidity in India: the Pavagada Pediatric Eye Disease Study 2. *Eye (Lond).* 2018 Oct;32(10):1590-1598. doi: 10.1038/s41433-018-0142-z. Epub 2018 Jun 11. PMID: 29891899; PMCID: PMC6189103.

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13: Kemmanu V, Giliyar SK, Shetty BK, Singh AK, Kumaramanickavel G, McCarty CA. Parental inability to detect eye diseases in children: barriers to access of childhood eye-care services in south India. *Eye (Lond).* 2018 Feb;32(2):467-468. doi: 10.1038/eye.2017.170. Epub 2017 Aug 18. PMID: 28820186; PMCID: PMC5811692.

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population aged above 40 years. *Ophthalmic Epidemiol.* 2008 Jul-Aug;15(4):279-81. doi: 10.1080/09286580802105814. PubMed PMID: 18780262.

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