Dr. Teena Koshy

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Personal Profile

I received both a Master's degree and Ph.D. in Human Genetics from the Department of Human Genetics, Sri Ramachandra Institute of Higher Education and Research. My thesis was a study on transcription factors *TBX1*, *NKX2.5* and folate metabolism genes in conotruncal heart defects. I have 20 years of teaching and research experience in the area of Human Genetics and Genomics . My areas of research are in genetic determinants of human disease and radiation genetics.

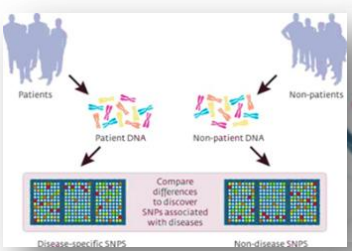
Research Interests

Genetic Determinants of :

- Heart disease
- Acute lymphoblastic leukemia
- Parkinson's disease
- Dystonia
- Hereditary cancers
- Polycystic ovarian syndrome
- Diabetes mellitus

Radiation Genetics:

- Chromosomal sensitivity in directly irradiated and bystander normal and cancer cells after low and high LET irradiation
- A Tiered Bio dosimetry Approach for the Management of Large Scale Radiological and Nuclear Emergencies
- Chromosomal sensitivity in directly irradiated and bystander normal and cancer cells after low and high LET irradiation with its implications for prospective therapy induced delayed health effects



Lab members

Present members

- **Ms. Sharon Benita A**. Research Scholar (Full Time). Susceptibility to Acute Lymphoblastic Leukaemia - A study on the influence of Genetic polymorphism.
- **Ms. Rekha S**. Research Scholar (Part time-External). An Integrated Clinical and Genetic study of Dystonia in Indian patients.
- **Ms. Anitha S**. Research Scholar ((Part time-External). Whole Exome Sequencing study of Parkinson's disease and related endophenotypes in the Indian population.
- **Ms. Ravinuthala Soundaryalahari** . Research Scholar (Part time-External).Comprehensive molecular genetics and phenotype analysis of hereditary cancers in Indian patients.
- **Dr. Haritha. P.S** (Part time-Internal).Identification of genetic basis of mandibular canine impaction and development of prediction tools and intervention protocols.
- **Ms. Leena Pavitha**. (Part time-Internal). Association Of Genetic Polymorphism With Toxicities Of High Dose Methotrexate In Children With Acute Lymphoblastic Leukaemia
- **Dr. Swathy Yuvraj**, (Part time-Internal). Effect of cryopreservation on sperm telomere length and influence of sperm telomere length on intracytoplasmic sperm injection outcomes

Past members

- **Dr. Jiby Jolly Benjamin**. 2018-2023 (Full time MD- Ph.D.). Study of inflammatory markers, stress markers and cytokine gene polymorphisms among Indian women with polycystic ovarian syndrome.

Selected Publications

1. Rajamuthiah P, B SKB, Antony SB, Koshy T. The potential influence of GSTT1 null genetic polymorphism on coronary artery disease: A pilot study in a South Indian cohort. Indian Heart Journal/Indian Heart Journal. March 2024. doi:10.1016/j.ihj.2024.03.002

2. Moorthy S, Koshy T. Risk association of the nitric oxide synthase VNTR intron 4 a/b variant with diabetic nephropathy – a pilot study. Nucleosides, Nucleotides & Nucleic Acids. February 2024:1-10. doi:10.1080/15257770.2024.2317411

3. Narasimhan U, Janakiraman A, Puskur D, Anitha FS, Paul SF, Koshy T. Case Report: A Disease Phenotype of Rett Syndrome and Neurofibromatosis Resulting from A Bilocus Variant Combination. Journal of Autism and Developmental Disorders. May 2023. doi: 10.1007/s10803-022-05458-6

4. Magatha LS, Scott JX, Subramaniam G, Chandrasekaran T, Paul SFD, Koshy T. Cytogenetic and Fluorescence in situ Hybridization Profile of Pediatric Acute Lymphoblastic Leukemia in a University Hospital in South India. Medical Principles and Practice. 2021;30(6):563-570. doi:10.1159/000518280

5. Subramanian N, Ramanathan S, Paul SFD, Venkatesan V, Koshy T. A case-control association of RANTES (-28C >G) and CCR5-Delta32 polymorphisms with Parkinson's disease in Indians. Neuroscience Letters. 2020;739:135404. doi:10.1016/j.neulet.2020.135404

Full Publication list: https://scholar.google.com/citations?user=vWKqk4QAAAAJ&hl=en