Name: B. Nandhini, M.Sc

Designation: Senior Lecturer

Department of Human Genetics

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Area of Research Expertise: Cytogenetics and Molecular Genetics

Project conducted:

1. A study on the RFC1 gene polymorphism and their association with Down syndrome.

- 2. To identify the association of C677T Polymorphism in the Methylenetetrahydrofolate reductase (MTHFR) gene with Male infertility.
- 3. The FCRL3 2169T>C polymorphism and the risk of endometriosis-related infertility in a Indian population
- 4. To identify the association of A1298C Polymorphism in the Methylenetetrahydrofolate reductase (MTHFR) gene with Attention Deficit Hyperactivity Disorder (ADHD).
- 5. Polymorphism of the oestrogen receptor β gene is related to infertility and infertility-associated endometriosis in South Indian population
- 6. The 763C>G Polymorphism of the Secretory PLA2IIa Gene is Associated with Endometriosis in a Indian population.
- 7. Association of Cytotoxic T-Lymphocyte Associated Protien (CTLA-4)+49A/G Gene polymorphism and its risk in endometriosis
- 8. Association Of Protein Tyrosine Phosphate Non-Receptor Type22(PTPN22)/Lyp 1858C>T Gene Polymorphism Related To The Risk Of Endometriosis In Indian Women.
- 9. Q36R(rs35431622) polymorphism in KISSPEPTIN (KISS1) GENE and idiopathic female infertility
- 10. Association of interleukin 1 beta gene (+3953) polymorphism in endometriosis.
- 11. Association of Interleukin -16(IL-16) gene polymorphism related to the risj of Endometriosis
- 12. Association between FOXP3 polymorphism and Endometriosis in infertile women.
- 13. Relationship between interleukin-6 gene polymorphism with polycystic ovary syndrome.

Conference attended

- 1. WAT 2009: Technical conference on genotoxicity
- 2. International conference on Radiation Biology- Nanotechnology, Imaging and stem cell research in radiation oncology (ICRB- NISRRO) in 2010, Sri Ramachandra University, Chennai.
- 3. Satellite Symposium of international Conference on radiation Biology- Nanotechnology, Imaging and Stem cell Research in Radiation Oncology (ICRB- NISRRO) organized by Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam in Nov 18, 2010
- 4. 5th Annual Conference on Genetic and Molecular Diagnosis in Moderm medicine 2012.
- 5. International Conference on "Updates in Research Ethics and Research Methodology 2013"
- 6. National conference on "Setting bench marks in Teaching and Learning through ICT organized by the Internal Quality Assurance cell at Sri Ramachandra University, 2016
- 7. National Conference on "Phytochemicals as Biotherapeutics— Unraveling the Mystery of Natural Products (Herbescon 2016)"
- 8. International conference on 'Advances in Biotechnology and Biotherapeutics (ICABBS 2017)

Work shop Attended:

1. Grant writing workshop at Sri Ramachandra University, 2014

Funded Project

1. Gate project completed in 2013 project entitled "Role of MTHFR gene polymorphism in male infertility".

Posters presented

- Nandhini B, Teena Koshy, Sumitha R, SujiKumari M, RaheemaBeevi K, Solomon F.D. Pauland Venkatachalam P. Structural variations of chromosome 9 and its association with genetic disease presented at 5th Annual Conference on Genetic and Molecular Diagnosis in Moderm medicine 2012
- 2. Nandhini B., M.sc, Andrea Mary F., M. Phil, Solomon F.D Paul., Ph.D. Therapeutic Uses of Aloe vera presented at National Conference on Phytochemicals as Biotherapeutics Unraveling the Mystery of Natural Products (Herbescon 2016)

- **3.** Andrea Mary F., M. Phil, **Nandhini B., M.sc** ,Solomon F.D Paul., Ph.D. "Cancer fighting phytochemicals :Molecular targets and potential drug like inhibitors from medicinal plants" in National Conference on 'Phytochemicals as Biotherapeutics Unraveling the Mystery of Natural Products (Herbescon 2016)
- **4. Nandhini. B,** Vettri Selvi. V, N. Sanjeeva Reddy, Venkatachalam. P, Solomon F.D Paul. "Role of MTHFR gene polymorphism in Male Infertility" in international conference on 'Advances in Biotechnology and Biotherapeutics (ICABBS 2017)
- **5.** Nandhini.B¹, Solomon F. D. Paul², Akshaya.J³, B.Drusilla Blessey³, Joanna Grace Herald³, Nandhini.N³, <u>Thenmozhi.J³</u> Role Of Cytogenetic Analysis In Screening Of Trisomy 21 Using Ultrasound Markers-Nuchal Translucency & Unossified Nasal Bone in 4th Annual conference of MMM Genetics meeting 2019.

Publication

- 1. Bibhas Kar, **B. Nandhini**, R. Revathi, Ring chromosome 8 and trisomy 8 in a patient with acute myeloid leukemia. Indian Journal of Hematology and Blood TransfusionMarch 2009, Volume 25, *Issue 1*, pp 30-32
- 2. Suji Kumari M, Raheema Bevi, **Nandhini B**, Teena Koshy, Vetriselvi, V, Venkatachalam, P. A mosaic karyotype and Y-chromosome micro deletion in an infertile male. Sri Ramachandra Journal of Medicine, 2012
- **3.** Raheema Bevi, Princy Mathew, **Nandhini B**, Teena Koshy, Solomon Paul, Venkatachalam P, Vetriselvi, V. Sex reversal sibling case reports. Sri Ramachandra Journal of Medicine,2012

Clinical focus

Currently part of diagnostic division of Department of Human Genetics, SRU. Actively involved in Cytogenetics and Molecular Cytogenetics of prenatal samples and Bone Marrow samples.

Award

1. Awarded the best paper for the poster presentation entitled "Role of MTHFR gene polymorphism in Male Infertility" in International conference on 'Advances in Biotechnology and Biotherapeutics (ICABBS – 2017)

2. Awarded for the funding under "GATE-Young Faculty Research Grant" for the year 2019-2020.