



Dr. Nirupama Chatterjee

Principal Research Scientist

BRIEF PROFILE

Dr. Nirupama Chatterjee joined the Department of Education and Research, Artemis Hospitals, Gurgaon as Principal Research Scientist in 2017. Her primary interest is in understanding the role of epigenetic factors in the development of lifestyle disorders. Besides, she has also worked on projects on molecular characterization of antibiotic resistance during her tenure here.

Dr. Nirupama Chatterjee is a PhD in Fisheries Science from the Central Institute of Fisheries Education, Mumbai. During her PhD she tried to understand the stress physiology of Indian fresh water fish and thereafter, she worked as a researcher in the Laboratory of Genome Science, Tokyo University of Marine Science and Technology, Tokyo.

She has previously worked as a Molecular Geneticist in DBT sponsored project on Thalassemia and Hemoglobinopathies at the Bhopal Memorial Hospital and Research Centre, Bhopal & as a Technical Officer at the Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad. During her period in CDFD she worked on projects involving “Premature Cellular Senescence” and “Histone Acetylation and DNA Damage Response”. The major findings of the projects are deciphering the role of Rac1-NADPH oxidase axis in inducing growth arrest in cancer cell line A549 and influence of extracellular metabolites on DNA damage response by affecting the levels of H3K56acetylation and deacetylase Sirtuin 6.

PRESENT RESEARCH INTEREST:

Genetics does not conclusively explain the rise of conditions like Diabetes, Polycystic Ovarian Syndrome, obesity etc in the past few decades. Genes, lifestyle conditions, environmental contaminants all have a role in these disorders. My work will try to understand how epigenetic marks like acetylation, lactylation etc and their upstream regulators are affected in various lifestyle disorders. In this pursuit, I will collaborate with the clinicians in identifying molecules/biomarkers that are specific to a disease condition and check whether these can be exploited for future diagnostic and therapeutic use.

My other area of interest is to understand the effect of lifestyle and age on the quality of sperm and ovarian granulosa cells. Along with the Clinical Embryology & Andrology Lab; I will develop tests for quality check of sperm, ova and other diagnostics for the IVF lab.

Projects at Present:

Unravelling the role of Sirtuin1 in the onset and progression of Polycystic Ovarian Syndrome (Sanctioned by Department of Biotechnology)

Contact Information

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