JSS ACADEMY OF HIGHER EDUCATION & RESEARCH
(DEEMED TO BE UNIVERSITY) MYSURU

JSS MEDICAL COLLEGE

JSS ACADEMY OF HIGHER EDUCATION & RESEARCH
(DEEMED TO BE UNIVERSITY)
ACCREDITED 'A++' GRADE BY NAAC

DEPARTMENT OF MEDICAL GENETICS AND SIG GROUP - NEXT GENERATION SEQUENCING DATA ANALYSIS FOR MONOGENIC DISEASES (NGSMD)

Invites you to the Guest Lecture

Mission Programme in Paediatric Rare Genetic Disorders and Application of Long-read genome sequencing

Speaker Profile & Talk Overview

Dr Usha Dutta is a Cytogeneticist at CDFD, Hyderabad with nearly 27 years of experience in cytogenetics, molecular cytogenetics, and genomics. A DAAD Fellow and PhD in Human Molecular Genetics from Martin Luther University, Germany, she is a Fellow of the Telangana Academy of Sciences (FTAS) and Treasurer of the Indian Society of Human Genetics (ISHG). Her research focuses on chromosomal breakpoint mapping, novel gene discovery, and long-read genome sequencing of structural variants. She is an NABL assessor and has published multiple national and international publications.

The Mission Programme on Paediatric Rare Genetic Disorders (PRaGeD), supported by the DBT, Government of India, is a pan-India initiative involving 16 centres to improve diagnosis and discovery of novel genes and variants underlying paediatric rare genetic disorders. A key component is the development of long-read genome sequencing (LRS) for resolving structural variants that are challenging to detect using conventional karyotyping and short-read sequencing. The talk will highlight the application of Oxford Nanopore and PacBio LRS in resolving complex chromosomal rearrangements, with case-based examples demonstrating breakpoint resolution and identification of disrupted or fusion genes.

Dr Usha R Dutta
Cytogeneticist, Diagnostics Division
Centre for DNA Fingerprinting and Diagnostics, Hyderabad

"All the faculties, undergraduates, postgraduates, and PhD students are cordially invited."

24th August, 2026
11:00 AM - 12:00 PM (IST)
Lecture Hall 2, JSS Hospital

www.jssuni.edu.in
medicalgenetics@jssuni.edu.in
Dr. Prince Jacob
+91-7848836623