List of PhD project vacancies for Jan 2025 session

Biological Engineering		
1	Shantanu Pradhan	Expansion microscopy
2	Richa Karmakar	Lab-on-chip technology for biomedical applications
3	Krithika Ravi	Metabolic engineering strategies for the upcycling of aromatics from waste resources to value-added products
4	M. Hamsa Priya	Molecular Modeling of Peptide Assembly and Aggregation
5	Greeshma Thrivikraman	Neuroimmunomodulation on a chip

Biological Sciences		
1	Greeshma Thrivikraman	Injectable microgels for chondrogenesis
2	Santhosh Sethuramanujam	(1). Investigating the function of retinal neuronal circuits using single cell patch clamp recordings. (2). Performing and analyzing large-scale neuronal recordings in brain to understand the circuit mechanisms underlying visual behaviour.
3	Amal	Deciphering the role of PIGBOS1 in metabolism
4	Himanshu Sinha	Role of Ribosomal Protein Variants in Phenotypic Plasticity; Role of Ribosomal Protein Variants in Pan-Transcriptome and Pan-Proteome Variation
5	Mamata Bangera	1) Role of cytoskeletal filament crosslinking in cellular processes 2) Modification of cytoskeletal organisation in plant response to stress
6	Vani J	(1). Understanding cell-cell communication in bacteria and its relevance to antibiotic resistance. (2). Understanding novel bacterial SIMs and their interaction with novel immune receptors at the neuro-immune interface. (3). Virus infections instigating autoimmune diseases

Computational Biology		
1	Meiyappan Lakshmanan	Multi-omics data driven CHO cell line development; Single cell multi-omics data integration
2	Michael Gromiha	1. AI based methods for detecting cancer mutations and image analysis 2. Explore protein-protein interactions for Papaya Ring Spot Virus aphid transmission and design potential inhibitors
3	N Manoj	Molecular evolution of GPCRs
4	M. Hamsa Priya	Machine Learning Guided Biomolecular Simulations
5	Himanshu Sinha	Pan-Genome-Scale Metabolic Modelling of Large Yeast Population; Role of Ribosomal Protein Variants in Pan-Transcriptome and Pan-Proteome Variation
6	Srinivasa Chakravarthy	1. Developing improved Deep Brain Stimulation (DBS) protocols for PD and dystonia using computational modeling 2. developing a unified model of spatial navigation and declarative functions of the hippocampus