

**Department of Biotechnology, IIT Madras**  
**MS (by Research) admissions July 2023**

**List of available MS (by Research) Project titles**

**1) CB- Computational Biology Stream**

S.No.	Faculty Name	Project title(s), Number of vacancies
1	M. Hamsa Priya	Computational investigation of the molecular interaction between cyclodextrin and biomembrane (1 student)
2	Karthik Raman	ML and model-driven approaches approaches to design biological circuits Cancer genomics: Identifying correlated mutations from cancer genomic data Cancer genomics: ML approaches to identifying key mutations in cancer genomes responsible for radio-sensitivity (1 student)

**2) BS- Biological Sciences Stream**

S.No	Faculty Name	Project title(s), Number of vacancies
1	Nathiya	Understanding the role of mediator kinases in pancreatic neuroendocrine tumours (1 student)
2	Nitish Mahapatra	Regulation of candidate genes for cardiovascular disease (1 student)
3	S. Mahalingam	Spacial genome biology to understand pancreatic cancer pathogenesis (1 student)
4	Baskar	Role of neurotransmitters in plant movement: A study in <i>Mimosa pudica</i> (1 student) Role of gasotransmitters and phytohormones in Dictyostelium growth and development (1 student)

**3) BE- Biological Engineering Stream**

S.No	Faculty Name	Project title(s), Number of vacancies
1	Smita Srivastava	Metabolic engineering in Yeast for biosynthesis of the key intermediates in plant secondary metabolism. (1 student)
2	Richa Karmakar	Computational analysis of cell-cell interaction during chemotaxis (1 student)
3	Madhulika Dixit	Mechanical characterization of engineered vascular cells (1 student)
4	Vignesh Muthuvijayan	Bioactive scaffolds for soft tissue regeneration (1 student)
5	Guhan Jayaraman	Strain engineering for bioconversion of lignocellulosic sugars to platform chemicals (1 student)