



**TATA MEMORIAL CENTRE**  
**Advanced Centre for Treatment, Research and Education in Cancer**  
**(ACTREC)**

Kharghar, Navi Mumbai - 410210

(A Grant-in-Aid Institution of the Department of Atomic Energy, Government of India)



**PROJECTS FOR Ph.D. JUNIOR RESEARCH FELLOW 2023 BATCH**

NO.	PROJECT TITLE	GUIDE
1	The role of 14-3-3 $\sigma$ in regulating therapy resistance and tumor progression	Dr. Sorab N. Dalal
2	Comparative proteomic analysis of 14-3-3 ligand association	Dr. Sorab N. Dalal
3	Deciphering the tumor associated functions of pregnancy zone protein in breast cancer	Dr. Syed K. Hasan
4	Understanding the role of mutations in the dynamics of homo and heterodimerization of HER2 in breast cancer	Dr. Kakoli Bose
5	Designing cancer therapeutics to target the anti-apoptotic cFLIP-CaM interaction	Dr. Kakoli Bose
6	Regulation of amino acid sensing mechanisms during developmental and malignant haematopoiesis in <i>Drosophila</i>	Dr. Rohan Jayant Khadilkar
7	Investigating oncogenic ribosomal apparatus in hepatocellular carcinoma (HCC)	Guide: Dr. Prasanna Venkatraman Co-Guide: Dr. Sunil Shetty
8	Role of ribosome composition during stress response.	Dr. Sunil Shetty
9	Tumor-associated myelomonocytic cells and B lymphocytes cross-talk in epithelial malignancies	Dr. Subir Biswas
10	Exosomal biomarkers for breast cancer prognosis	Dr. Sejal Patwardhan
11	Studies of protein-protein interactions to evaluate pathogenicity of mutations identified in different functional domains of BRCA1	Dr. Ashok K. Varma
12	Structural studies of mutations identified in PML-RARA causing resistance to acute promyelocytic leukemia	Dr. Ashok K. Varma Co-Guide: Dr. Syed K. Hasan
13	Proteomics based approach to evaluate the urinary biomarkers for bladder cancer treated with radiotherapy	Guide: Dr. Ashok K. Varma Co-Guide: Dr. Vedang Murthy
14	Studying the role of complement proteins in tumour-microenvironment	Dr. Sharath Chandra Arandkar
15	Characterizing Pathogenic Mutations of Procaspace-8 to uncover Apoptosis Regulation in cancer	Dr. Kakoli Bose

**New Translational Research Program at ACTREC: Projects are co designed and co mentored by Clinician and the Principal Investigator**

NO.	PROJECT TITLE	GUIDE
16	Studies on prospective use of Tucatinib in Trastuzumab therapy resistant breast cancer	Guide: Dr Abhijit De Co-Guide: Dr. Sudeep Gupta
17	Discovery and development of drugs for the treatment of endothelial damage associated complications in haematopoietic stem cell transplantation	Guide: Dr. Vikram Gota Co-Guide: Dr. Navin Khattry