

## ONGOING SPONSORED PROJECTS: DEPARTMENT OF BIOTECHNOLOGY, JIIT NOIDA

S. No.	Principal Investigator	Co-Principal Investigator(Co-PI)/ Co-Investigator(Co-I)	Title	Funding Agency	Start Date	End Date	Grant Amount (In Lakhs)	Department
1	Prof. Indu Verma, PGIMER Chandigarh	Prof. Sudha Srivastava (Co-PI)	Development and evaluation of rapid diagnostic test/device for pediatric pulmonary tuberculosis based on the detection of host/mycobacterial proteins in urine samples	ICMR	Approved (October 2023)		INR 53.80 Lakh (JIIT)	Biotech
2	Prof. S Krishna Sundari	Dr.Kamlesh Shukla (Pt.RSU)	Evaluate ectomycorrhizal diversity in mining-disturbed and undisturbed forest ecosystems in Bastar region, generate metabolic activity profiles of forest ectomycorrhizae to propose best performing isolates for soil restoration	DBT	18 January 2024	17 January 2027	59.80400 Lakh (Total) INR 35.55200 Lakh (JIIT)	Biotech
3	Prof. Pammi Gauba	Prof.Shweta Dang	Exploring the efficacy of plants and microbes for the remediation of E-waste contaminated soil.	Ministry of Environment, Forest & Climate Change	27 November 2019	26 November 2024	INR 48.44 Lakhs	Biotech
4	Dr. Rajnish Prakash Singh	NA	Molecular Characterization of Type VI secretion system in Enterobacter cloacae SBP-8 to employed as antibacterial tool	DBT	2021	2026	INR 1.13 Crore	Biotech
5	Dr Chakresh Jain	Prof Shweta Dang	Deciphering potential gene markers and variants associated with Adrenoleukodystrophy, based on Machine learning and system biology approaches on RNA-Seq data towards therapeutics	DBT	24 January 2024	24 January 2026	INR 28.43 lakhs	Biotech
6	Prof Vibha Rani	Prof Pammi Gauba	Study to explore Cross Kingdom Regulation of Anticancerous Indian Herbs derived XenomiRs in Lung cancer: Basic research for Future herbal oncotherapeutics	ICMR	20 February 2023	19 February 2026	INR 15 lakhs (for First Year)	Biotech
7	Prof Shweta Dang	Prof Pammi Gauba	Nano-carrier based nose to brain delivery for anti-psychotic drugs and natural compounds	ICMR	01 February 2023	31 January 2026	INR 11 lakhs (for first Year)	Biotech
8	Prof. Pammi Gauba & Prof. Vibha Rani	Prof. Shweta Dang (Co-PI) Centre Representatives: Prof. Reema Gabrani & Prof. Indira Sarethy	Development of Natural Product Laboratory for Advance Research	DST-FIST	March 2022	March 2027	INR 66.00 lakhs	Biotech
9	Prof. Sudha Srivastava	Dr. Deepshi Thakral (Co-PI)	Development of Electrochemical biosensor for detection of circulating tumor DNA mutations in Acute myeloid leukemia	ICMR	July 2022	July 2025	INR 33.142 lakhs (for first two years)	Biotech

10	Dr. Shazia Haider	Prof. Pammi Gauba	Identification of key regulators and their controlling Mechanism in a combinatorial amyotrophic lateral sclerosis Network: an integrated bioinformatics analysis	Life Sciences Research Board (LSRB), DRDO	June 2022	June 2025	INR 24 lakhs	Biotech
11	Dr. Jyoti Sharma (Institute of Bioinformatics)	Prof.Vibha Gupta (JIIT)	Development of computational framework for COVID-19 multi-omics data analysis.	ICMR	May 2022	April 2024	INR 11.04 lakhs	Biotech
12	Prof.Vibha Gupta (JIIT)	Prof Punit Kaur (AIIMS) AND Dr Jyoti Sharma (Institute of Bioinformatics)	Reverse pharmacology and multi-target approach for designing of novel therapeutics and candidates for Covid-19.	ICMR	April 2022	April 2024	INR 21.7 lakhs	Biotech

### **Students Funded Projects where Faculty is a Mentor**

S No.	Sponsored Projects Completed (Title of Project)	Name of PI/ I	Amount (Rs. in Lakh)	Year of start and Completion	Funding Agency
1.	Presence of antibiotics in soil and its remediation	PI: Ms. Arushi Saxena; Mentor: Prof. Pammi Gauba	30.97	2023-2025	DST
2.	Co-administration of Metformin and Vitamin D fro their additive antihyperglycemic effects of nano-formutation for their enhanced targeting and efficacy: An in-vitro study.”	PI: Saksi Tyagi; Mentor: Dr Shalini Mani	23 Lacs	2022-2024	ICMR-SRF
3.	Investigation of Indian Herbs as ACE2 and TMPRSS2 modulator in HCQ Induced Cardiotoxicity	PI:Priyadarshini Gupta, Mentor: Prof Vibha Rani	24.2	2021-26	DST – Inspire
4.	Ayurvedic herbal formulations in modulating gut microbiota which is associated with diabetic cardiomyopathy.	PI:Shivani Singhal, Mentor: Prof Vibha Rani	24.2	2019-24	DST – Inspire
5.	<i>Syzygiumcumini</i> polyphenols in drug induced cytotoxicity.	PI:RenuBhadana, Mentor: Prof Vibha Rani	24.24	2019-24	CSIR-JRF
6.	To develop a millet-based fermented food product and assessment of its nutritional and functional properties.	PI: Rishibha Gupta, Mentor: Smriti Gaur	24.6	2019-24	DBT
7.	Designing an alternative cancer therapy by study of anticancerous herbs for their potential mitocan activity.	PI: Geeta Swargiary, Mentor: Dr Shalini Mani	22.08	2018-23	NFST (Ministry of Tribal affairs),
8.	Analysis of host interactors of Chikungunya virus non structural Protein 1	PI:Ritu Ghildiyal, Mentor: Prof Reema Gabrani	16.2	2019-22	CSIR-SRF

9.	Structure, function and inhibition of isocitrate lyases of <i>Mycobacterium tuberculosis</i> .	PI: Ms. Monika, Mentor: Dr. Vibha Gupta	22	2016-2021	DST - Inspire
10.	Fabrication of nanotechnology based point- of-care device for thyroid disease diagnosis.	PI: Rahul , Mentor: Sudha Srivastava	22	2016-2021	DST - Inspire
11.	Genomics of diverse Wolbachia species in Indian Drosophila and to study host-symbiont interactions	PI: Ms. Kopal Singhal, Mentor: Dr Sujata Mohanty	17	2017-2021	CSIR- JRF & SRF
12.	PLGA Nanoparticles for Baclofen and Lamotrigine: Nose to brain delivery	PI: Mr.Kuldeep Nigam, Mentor: Dr Shweta Dang	7.1	2019-2021	CSIR-SRF
13.	Development of PLGA nanoparticles loaded with donepezil and memantine for brain drug delivery through nasal route in Alzheimer's disease.	PI: Ms. Atinderpal Kaur, Mentor: Dr. Shweta Dang	26	2017-2020	BioCARE -DBT
14.	Nanotechnology based vaccine development against Hepatitis E virus.	PI:Dibya Rani, Mentor: Sudha Srivastava	22	2015-2020	DST - Inspire
15.	Investigating microRNAs and Matrix metalloproteinases as therapeutic target in glucose induced cardiac stress	PI: Mr. Sharad Saxena, Mentor: Dr. Vibha Rani	9.1	2018-2020	CSIR-SRF
16.	Cardioprotective Effects Of Curcumin Against Drug Induced Toxicity	PI: Ms. Aditi Jain, Mentor: Dr. Vibha Rani	9.1	2018-2020	CSIR-SRF
17.	Bioprospection of microorganisms from selected niche habitats (soil/rock) for antimicrobial products.	PI: Mrs. Nidhi Srivastava Mentor: Dr. Indira P Sarethy	22	2014-2019	ICMR
18.	Identification of peptide/protein binders of Chikungunya Virus.	PI: Ms. Garima Agarwal, Mentor: Dr. Sanjay Gupta	22	2015-2019	DST- Inspire

