

**School of Biotechnology**  
**GAUTAM BUDDHA UNIVERSITY**  
**List of Sponsored Research Projects at SoBT**

S. No	Name of the Project	Name of the PI	Funding Agency	Total amount (Lakhs)	Current Status
	Development of Pure Lines of Indian Cotton Cultivar(s) for the Trait of In Vitro Regeneration	Dr. Bhupendra Chaudhary	CSIR, India	25	Ongoing
	Genetics of <i>In vitro</i> regeneration through somatic embryogenesis in cotton ( <i>Gossypium hirsutum</i> L. cv. Coker 310)	Dr. Bhupendra Chaudhary	DST, India	16	Completed
	Introgression of Regeneration Character into Elite Indian Cotton Cultivars	Dr. Bhupendra Chaudhary	CSIR, India	34	Completed
	Spatiotemporal Manipulation of Profilin Gene Family in Cotton Fiber Cells for Increased Yield and Quality	Dr. Bhupendra Chaudhary	DBT, India	58.4	Completed
	Target Mimicry-Based Silencing of microRNA167 Gene Family Targeting Auxin Response Factors (ARFs)' Gene Expression During Cotton Fiber Development	Dr. Bhupendra Chaudhary	DBT, India	62.9	Ongoing
	Root-Specific Reduction of Cytokinin for Enhanced Root Growth and Drought Tolerance in oilseed mustard ( <i>Brassica juncea</i> L. cv. Varuna)	Dr. Bhupendra Chaudhary	SERB- DST, India	27	Ongoing
	Design and evaluation of novel Beta-3 adrenoreceptor agonists for potential antidepressant activity	Dr. Shakti Sahi	DST, India	23	Completed
	Design synthesis and evaluation of potent aminopeptidase inhibitors for malarial therapy	Dr. Shakti Sahi	DBT, India	24	Completed
	Cloning expression and structural studies on dihydrouridine synthase from <i>p. aeruginosa</i>	Dr. Nagendra Singh/ Dr. Imteyaz Qamar(Co-PI)	ICMR, India	46.8	Ongoing
	Structural basis of nickel transport in <i>k. Pneumoniae</i>	Dr. Nagendra Singh	ICMR, India	22	Ongoing
	Structural and functional characterization of SRp508	Dr. Nagendra Singh/ Dr. Imteyaz Qamar(Co-PI)	CSIR India	21	Ongoing

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	Therapeutic Aspect of Keratinocyte Growth Factor on Alveolar Regeneration in Emphysematous condition - Molecular Mechanism	Dr. J. P. Moyal	DST, India	14	Completed
	Identification of Molecular Pathways in Alveoli Regeneration in an Established Emphysematous Lung: All Trans Retinoic Acid - A Way to Novel Therapy Option	Dr. J. P. Moyal	DBT, India	32	Completed
	Transcriptional and Functional Characterization of <i>Xenorhabdus nematophila</i> toxin-antitoxin (TA) modules.	Dr. J. S. Rathore	DST, India	25	Completed
	Transcriptional, functional and persister cell formation studies of novel identified <i>yefM-yoeB</i> , <i>ccdAB</i> and <i>hipAB</i> toxin-antitoxin modules from <i>Xenorhabdus nematophila</i>	Dr. J. S. Rathore	CSIR, India	30	Ongoing
	Genome scale fitness profiling of transposon mutant library for identification of novel components of Target of Rapamycin (TOR) signaling pathway.	Dr. Rekha Puria	DST, India	21	Completed
17.	Identification and validation of novel anticancer drug targets in target of rapamycin (TOR) signaling pathway	Dr. Rekha Puria	DBT, India	34	Completed
18.	Investigations on cell intrinsic and extrinsic factors involved in age- and disease- induced senescence of endothelial progenitor cells	Dr. Savneet Kaur	DST, India	27	Completed
19.	Investigations on the role of Hepatitis B virus X protein (HBx) in cancer stem cell-mediated initiation and progression of hepatocellular carcinoma	Dr. Savneet Kaur	DBT, India	34	Completed
20.	Contribution of angiogenesis and inflammation to fibrogenesis and regeneration in non-alcoholic fatty liver diseases (NAFLD)	Dr. Savneet Kaur	ICMR, India	29	Completed
21.	Development of Mega Nuclease for Targeted genome Engineering in rice	Dr. Vikrant Nain	DBT, India	18.5	Completed
22.	Development of drought tolerant rice by expression of RNA chaperon gene	Dr. Vikrant Nain	CSIR, India	19	Completed
23.	High throughput design, synthesis and validation of TALENs for targeted genome engineering	Dr. Vikrant Nain	DBT, India	86	Ongoing
24.	Molecular mechanisms of anti-cancer effect of Crocetin (a natural product of saffron) and its synergistic effect with Cisplatin in Smokeless Tobacco & Nicotine induced Head and Neck Cancer Cells	Dr. Vishwas Tripathi	DST, India	22	Completed

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25.	Isolation & characterization of anti-tubercular principle from contaminating bacterial strain	Dr. Vishwas Tripathi (CO-PI)	DBT, India	30	Completed
26.	Development of novel adsorbent for pre-concentration of the pathogens and molecular beacon based PCR array to enable culture-free detection for food and waterborne pathogens.	Dr. Siya Ram	DST, India	23	Completed
27.	Designing of potential antagonist of ASF/SF2 for application in Cancer Therapy	Dr. Dr. Imteyaz Qamar / Dr. Nagendra Singh (Co-PI)	ICMR, India	48	Ongoing