

Status of pending research project proposals submitted under Research Support Scheme in January 2026 cycle

NOTE:

- 1) The project proposals submitted in January 2026, other than those listed below, have been informed of the outcome of their proposals.
- 2) Proposals pertaining to cancer research, the post consultation proposals will be taken up for further scrutiny

Proposals listed here are under scrutiny by the Internal Scrutiny Committee of GSBTM			
Sr. No	Name of PI	Broad Area	Project Title
1	Dr. N. Amaresan	Animal & Plant Biotechnology	Protist-bacteria-biochar interactions based ecological engineering for improving plant root architecture supporting efficient N- and P- supply: The development of a trio-formulation for climate resilient agriculture
2	Dr. Ashutosh Kumar	Animal & Plant Biotechnology	Proton Beam Irradiation as a Tool for Rice Seed Quality Improvement: Transcriptome reprogramming of Germination and Seedling Growth
3	Dr. Aakanksha Wany	Animal & Plant Biotechnology	Molecular mechanisms behind plant immunity mediated by Pseudomonas-Tomato- Trichoderma tripartite interactions
4	Dr. Shiv Kant Shukla	Animal & Plant Biotechnology	Investigation of synergistic propagation model using tuber bearing medicinal plant Asparagus racemosus in association with medicinal mushroom and AMF for bio-prospecting
5	Dr. Sneha Macwana	Animal & Plant Biotechnology	Molecular Marker-Assisted Identification and Development of Fusarium Wilt-Resistant Pigeonpea (Cajanus cajan (L.) Millsp.)
6	Dr. Subramanian Sankaranarayanan Dr. Sangram Lenka	Animal & Plant Biotechnology	Multiplexed CRISPR-Cas9-Based Genome Editing for Concurrent Enhancement of Yield Components (Seed Size and Number) and Oil Quality in Brassica juncea.
7	Anamika Jha	Animal & Plant Biotechnology	Design and Formulation of an Affordable, Food-Grade nanobiopreservative for alleviating Postharvest Loss in Sapota
8	Prof. Sudhir Pratap Singh Dr. Ravindra Pal Singh Prof. Kashyap Kumar Dubey	Animal & Plant Biotechnology	From Fruit to Clarity: Developing a Local Enzymatic Solution for Juice Processing
9	Dr. Chitra Bhattacharya	Animal & Plant Biotechnology	Waste-to-Wealth: Optimizing Regional Agro-Residues for Water-Efficient, Fast-Growing, Cost-effective Approach of Oyster Mushroom (Pleurotus ostreatus) Cultivation in Saurashtra Region
10	Dr. Mangal Singh Rathore	Animal & Plant Biotechnology	Development of a Cell and Callus Culture Regeneration Based Breeding Pipeline for Genetic Diversification and Germplasm Improvement in agarose yielding Gracilaria dura
11	Dr. Sanjay Jha	Animal & Plant Biotechnology	Genome Editing of Finger Millet (Eleusine coracana) for Enhanced Heat Tolerance through Targeted Disruption of Negative Stress Regulators (EcOsRHS and EcProDH)
12	Dr. Rukam Singh Tomar	Animal & Plant Biotechnology	Development of Biofortified 'Golden Groundnut' Using CRISPR Genome Editing Tool for Combating Malnutrition
13	Dr. Devjani Indranil Banerjee	Animal & Plant Biotechnology	CHEMICAL AND BIOLOGICAL EXPLORATION OF MARINE CNIDARIANS DERIVED METABOLITES: A MARINE BIOPROSPECTING INVESTIGATION FOR DRUG DISCOVERY.
14	Dr. Megha Barot	Animal & Plant Biotechnology	Development of indigenous phyco-remediation technology for growth of seaweeds for economically viable use in industry/ pollution control/ Agriculture application
15	Dr. Pritesh Bhatt	Animal & Plant Biotechnology	Metabolic Profiling and AI-Assisted Molecular Docking of Under-Explored Gujarat Seaweeds for the Discovery of Anti-Biofilm and Anti-Inflammatory Leads with Targeted Validation
16	Dr. Nitin Kumar Singh	Animal & Plant Biotechnology	Development and Demonstration of a PVA-Gel Media Assisted IFAS System for Blue Economy-Compliant Treatment of Seafood Processing Wastewater in Coastal Gujarat
17	Dr. Gaurav Sanghvi	Animal & Plant Biotechnology	Enzymatic Enhancement of Nutrient Bioaccessibility for Effective Food Fortification
18	Prof. Kiransinh N. Rajput	Animal & Plant Biotechnology	Development of bacterial indole-3-acetic acid nanoformulations and their molecular impact on plant growth regulation
19	Dr. Sameer V Dalvi	Animal & Plant Biotechnology	Microbubble-Mediated Sustainable Crop Enhancement: Integrated ROS, Phytohormone and Transcriptomic Analysis in Mustard, Chickpea and Spinach
20	Dr. CHINTAN KAPADIA	Animal & Plant Biotechnology	Development of novel nano-carrier formulation for efficient delivery of nucleic acid in plants
21	Dr. Santlal J. Jaiswar	Animal & Plant Biotechnology	Elucidation of bio-effector mediated functional traits in agarophytes to ascertain sustained growth-enhancement effects
22	Dr. Nisha Singh	Animal & Plant Biotechnology	Genome-Wide Association Mapping of Phosphorus Use Efficiency Traits in Pigeon Pea (Cajanus cajan L.)
23	Dr. Vaibhav A Mantri	Animal & Plant Biotechnology	Continuous Light-Driven Metabolomic Shifts in Edible Green Seaweed Ulva: Insights for Sustainable Bio-Based Feedstock Development
24	Dr Anjana J	Animal & Plant Biotechnology	NUTR-AYUR FORTIFY: Biotechnological Enhancement of Micronutrient and Bioactive Content in Staple Grains using Ayurvedic Phytochemicals
25	Dr. Waquar Akhter Ansari	Animal & Plant Biotechnology	Multiplex CRISPR/Cas9 mediated genome editing to improve the oil ratio of omega 3 fatty acid in groundnut for health benefit
26	Dr. Manish Kumar Suthar	Animal & Plant Biotechnology	Integrated Molecular, Phytochemical, and Transcriptomic Approach for Authentication and Quality Evaluation of Threatened Commiphora Species.
27	Dr. Jitendriya Panigrahi	Animal & Plant Biotechnology	Comparative Toxicogenomic Profiling of Multiple Ulva Species Using Caenorhabditis elegans as an in vivo Model: Validating Ulva-Based technologies for functional food applications

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28	Dr. Renuka V	Animal & Plant Biotechnology	Development and Characterization of Clitoria ternatea-Fortified Rice for Controlled Starch Digestibility
29	Dr. Vaibhav A Mantri	Animal & Plant Biotechnology	Multilocal cultivation trial and agar characterization of microclonal propagules of industrially important red seaweed Gracilaria dura in Gujarat for niche domain applications.
30	Dr. Preetam Joshi	Animal & Plant Biotechnology	Development of a PGPM-Based Biopriming Strategy for Improving Ex vitro Establishment of Tissue-Cultured Banana Plantlets
31	Dr. Tisha Vyas	Animal & Plant Biotechnology	Reprogramming Plant Development through Wounding for Next-Generation In Planta Gene Editing
32	Dr. Kiran S. Chudasama	Animal & Plant Biotechnology	An Integrated Omics Approach for Early Detection, Diagnosis, and Management of Fungal Diseases in Chilli
33	Dr. Pooja C. Desai	Animal & Plant Biotechnology	Microbial and Metagenomic studies on Combinatorial effect of Cow Dung and Fulvic acid along with growth stages on the diverse endophytic bacterial community of Stevia rebaudiana Bertoni leaves
34	Dr. Chandrashekar Mootapally	Animal & Plant Biotechnology	Sea Cucumbers as Reservoirs of Agro-Industrially Important Genes: Bioprospecting the Gut Microbiota across the Gujarat Coastline
35	Dr. Ritika Jain	Animal & Plant Biotechnology	Effect of simulated microgravity on plant growth promoting rhizobacteria and their role in space agriculture
36	Dr. Arunkumar C. Patel	Animal & Plant Biotechnology	Development and validation of multiplex qPCR for bovine abortifacient pathogens
37	Dr. Vishal S Suthar	Animal & Plant Biotechnology	Probiotic Consortia for Prevention and Treatment of Bovine Endometritis: Comparative Efficacy of Reproductive Tract-Derived Niche Consortia vs Commercial Strain Consortia
38	Dr. Naveen Katoch	Animal & Plant Biotechnology	Molecular Diversity of Begomovirus associated with Chilli Leaf Curl Disease in Major Agro-Climatic Zones of Gujarat
39	Dr. Ravinayak Patlavath	Animal & Plant Biotechnology	Development of a Multi-Strain Biofertilizer for Enhancement of Pigeon pea productivity suitable for Geographical conditions of Gujarat.
40	Sunil Kumar Singh	Animal & Plant Biotechnology	Genetic modulation of tomato Metacaspase to enhance drought and heat tolerance.
41	Dr. Anjisha Maharshi	Animal & Plant Biotechnology	Development of Liposome- Mediated Mycoherbicide for the biological control of Water Hyacinth
42	Dr. Gaurav Shrimali	Animal & Plant Biotechnology	Transcriptomic and Metabolomic Insights into Brassinosteroid-Mediated Salinity Stress Responses in Arachis hypogaea L.
43	Dr. Sunil Kumar Singh	Animal & Plant Biotechnology	Efficient production of Human Transferrin in plant systems for therapeutic and biotechnological applications
44	Dr Rajesh Kumar Jha	Animal & Plant Biotechnology	Development of Salt and Drought Tolerant Biofertilizer Consortium for Sustainable Crop Production in Gujarat's Arid and Coastal Agriculture
45	Dr. Mohd Aamir	Animal & Plant Biotechnology	Development of a Modular Hypoxia-Responsive Promoter Testing Platform for bioengineering Flood resistant Crop Varieties
46	Dr. Mukund Chandra Thakur	Animal & Plant Biotechnology	Genetic Manipulation of Rhizobia for Better Uptake of Iron (III) – A Step Towards Better Biofertilizer
47	Dr. Raksha Bawankar	Animal & Plant Biotechnology	Molecular Approaches for Enhancing Growth and Stress Tolerance in Cotton Using a Novel SBPase Gene
48	Dr Mahendrapalsingh Rajput, Dr Ramesh K. Kothari	Animal & Plant Biotechnology	Exploring Culturable and Non-Culturable Endophytic Bacterial Diversity in Groundnut Root Nodules from Saurashtra Region to Promote Sustainable Agriculture
49	Dr. Ritesh Tandel	Animal & Plant Biotechnology	Enhancing sustainability in Natural shrimp farming through integrated filtration, biosolutions, and probiotic approaches
50	Dr. Ritesh Tandel	Animal & Plant Biotechnology	Integrated floating agriculture and shrimp culture in Rainwater fed ponds at Dandi village- Valsad
51	Dr. Ashish Warghane Dr. Rashmi Saini	Animal & Plant Biotechnology	Development and Characterization of a Polyherbal Nano formulation for the Management of Citrus Greening Disease (Huanglongbing)
52	Dr. Jyoti Tomar	Animal & Plant Biotechnology	Integrated biotechnological approach for sustainable mushroom cultivation and development of Nano - Enhanced Nutraceuticals
53	Dr. Mukesh Kher	Animal & Plant Biotechnology	Development and evaluation of novel herbal formulation as sustainable alternatives to antibiotics for the management of bovine mastitis and reduction of antimicrobial resistance
54	Dr. Visha Rathod	Animal & Plant Biotechnology	Multi-Omics Characterization of Indigenous Fermented Natural Farming Inputs for the Development of Sustainable Biofertilizers
55	Dr. Sanjay Kumar	Animal & Plant Biotechnology	Gold nanoparticle decorated graphene oxide nano-sheets as an electrochemical aptasensor platform for the detection of malathion in processed foods
56	Dr. Viral Shukla, Dr. Vimal Ramani,	Animal & Plant Biotechnology	Development of a Nanotechnology enabled Herbal Nano-Gel for Antibiotic Residue Free Management of Bovine Mastitis.
57	Dr. Poonam Mishra	Animal & Plant Biotechnology	Heterologous Expression & functional validation of Antifungal Protein (Afp) of Aspergillus flavus for resistance against fungal pathogens in Maize
58	Dr. Bappi Paul	Deep Tech	Development of Nanomaterial-Based Electrochemical Biosensors for Rapid On-Site Detection of Illicit Drugs and Toxic Substances
59	Prof. Sivapriya Kirubakaran	Deep Tech	Development of Antibody Functionalized Gold Nanoparticles for Biosensing Microbes
60	Dr. Shailja Dhiman	Deep Tech	Development of a Salinity-Resilient Nano-Enabled Microbial Bioinput from Indigenous Halophiles for Sustainable Groundnut Production in Gujarat

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61	Dr. Yogesh Meghrajani	Deep Tech	AI-Based Food Image Recognition for Dietary Assessment and Health Monitoring
62	Dr C. K. Sumesh Dr. Parikshit Sahatiya	Deep Tech	Smart Nanomaterial-Enabled Non-Enzymatic Biosensor for Early Detection and Real time Monitoring of Metabolic Syndrome
63	Dr. Hemant P. Soni	Deep Tech	From Ligand to Image: Engineering Gd-Free Dual-Mode MRI Contrast Nanomaterials
64	Saumyakanti Khatua	Deep Tech	Development of a Plasmonic Optical Platform for Rapid Point-of-Care Detection of Biomarker for Traumatic Brain Injury
65	Dr. Ankit Sudhir	Deep Tech	Engineering β -Glucosidase from <i>Paenibacillus polymyxa</i> for Enhanced Catalytic Activity
66	Dr Rahul Kumar	Deep Tech	Development of AI-Integrated, Bio-Inspired 2D Material-Based Sensor System for Non-Invasive Asthma Diagnosis through Breath Analysis
67	Dr. PL. Ramkumar	Deep Tech	Polymer-Based Biomaterials with Enhanced Thermal Conductivity for Biosensing Applications
68	Dr. Suveen Kumar	Deep Tech	Development of a Point-of-Care Electrochemical Aptasensor for Influenza Diagnosis
69	Dr. Dweipayan Goswami	Deep Tech	Developing a Synthetic Microbial Consortium for the Integrated Synthesis of Genetically Tuned Bacterial Cellulose and Functional Probiotic Beverages
70	Dr. Roshni Kumari	Deep Tech	Climate-Driven Vector Borne Disease Monitoring in Gujarat: Device Fabrication and Epidemiological modelling
71	Dr. Priyanka Makkar	Deep Tech	MXene-Grafted Viologen Polymer Brushes for Mechano-redox-Enabled, Self-Healing Electrodes in Next-Generation Self-Powered Implantable Cardioverter Defibrillators (ICDs)
72	Dr. Vaibhav Bhatt, Ms. Pooja Chavda, Dr Gaurav Shrimali, Mr. Shreyas Dhuliya	Deep Tech	Development of Human Lactoferrin Using Precision Fermentation Technology
73	Rohil Jain	Deep Tech	Microfluidics-enabled smart machine perfusion device for ex vivo storage of organs for transplantation
74	Dr. Anubhav Tiwari	Deep Tech	Antibacterial Activity and Osseointegration of Morphology-Varying 3DPrinted Titanium and Hydroxyapatite Implants
75	Dr. Partha Pratim Roy	Deep Tech	Selective Metal-ion Bio-sensing via Controlled Excited-State Processes in Green-Synthesized Carbon Quantum Dots
76	Sharmistha Majumdar	Deep Tech	Development of a novel low-cost peptide-based pull-down platform to investigate biomolecular interactions
77	Dr. Rohan Bhimpuria	Deep Tech	Design and Development of Quantum-confined Carbon Dots as Ratiometric Sensors for The Detection of Acetylcholinesterase and Organophosphate Neurotoxins in Biological Fluids
78	Dr. Gayatri Dave	Deep Tech	Biogenic Silicon quantum dots (SiQDs) from diatom frustules: properties and feasibility analysis
79	Dr. Archana R. Deokar	Deep Tech	Artificial Intelligence-Assisted Development of Sonochemical Metal Oxide Nanocoatings to Prevent Biofilm-Associated Antimicrobial Resistance in Spaceflight Systems
80	Dr. Biplab Kr Chatterjee	Deep Tech	Development of magnetic nanoparticle-based T1 and T2 contrast agents for efficient magnetic resonance imaging.
81	Dr. Kirtan Dave	Deep Tech	CARDIO-AI-RISK: An AI-Driven, Biology-Informed Platform for Prediction of Residual Cardiovascular Disease and Heart Failure Risk
82	Dr. Arvind Kumar Saxena	Deep Tech	Development of selective DNA collection swabs using ligand-free gold nanoparticles generated by femtosecond laser ablation
83	Dr. Anup V. Sanchela	Deep tech	Development of a Modular Transdermal Flexible Heating Patch for Controlled Drug Delivery
84	Dr. Sanjay Mohan Jha Dr. Vaibhavkumar Nandkishor Mehta Dr. Suresh Kumar Kailasa	Deep tech	Development of Portable Quantum Dot-Based Optical and Electrochemical Sensors for On-Site Detection of Fungal Infections in Agricultural Crops
85	Dr. Hemant Kumar	Deep Tech	A Nanozyme-Exosome Platform to Regulate Oxidative and Inflammatory Secondary Damage Following Spinal Cord Injury
86	Dr. Jagdishchandra K. Monpara	Deep Tech	Integrative Chloroplast Genome-Based Authentication and Network Pharmacology of Avipattikar Churna for Digestive Disorder Management
87	Krishna Kanti Dey	Deep tech	Dynamics of Liposomal Nanocarriers under Enzyme-Regulated Active Fluctuations for Enhanced Drug Transport Across Biological Barriers
88	Dr. Kalpesh B. Panara	Deep tech	Bioinformatics-Guided Evaluation and Validation of Ayurvedic Phytochemicals for Transdermal Drug Delivery in Insomnia
89	Dr. Niyati Acharya	Deep Tech	Bioinformatics-driven Identification of Anti-Urolithiatic Phytoconstituents in Rubiaceae for Ayurvedic Development
90	Dr. Krupa Shah	Deep Tech	CT-PET Guided Robotic Biopsy System for Multimodal Imaging Based Teleoperation
91	Janki K. Patel	Deep Tech	Exploration of Endophytic Bacteria from <i>Embelia ribes</i> (Vidanga) for Enhanced Production of Bioactive Secondary Metabolites
92	Dr. Ahsan Zaigam Rizvi	Deep Tech	An Integrated Deep Kernel Learning Framework for Multi-Omics Regulatory Networks

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93	Dr. Sachidanand Singh	Deep Tech	AI-Enabled Rational Design and Immunological Evaluation of Receptor-Targeted Liposomal Vaccines Disrupting the IrtAB-Mediated Iron Acquisition Axis in <i>Mycobacterium tuberculosis</i>
94	Dr. Kavita Yadav	Deep Tech	Engineering Cupriavidus necator as a Microbial Platform for Sustainable Biomanufacturing of Sandalwood Oil
95	Dr. Debjani Bagchi	Deep Tech	Development and Validation of Quantum Dot-Based Sensing Approach for Rapid Detection of microRNAs as Prominent Biomarkers for Early Prognosis of Neurological Disorders in Healthcare
96	Dr. Vijay Jagdish Upadhye	Environmental Biotechnology	From Contamination to Innovation: Mining Lipase-Producing Bacteria for High-Efficiency Bio- Detergent Development
97	Dr. Mohammed Abdul Rasheed Dr. Haidar Abbas Dr Duggirala Srinivas Murty	Environmental Biotechnology	Development of Bacterial Consortium and improving process for enhancing Biogas Production from Napier grass and its scale up
98	Dr. Sapna Chandwani	Environmental Biotechnology	Bioremediation and biofortification of micronutrients in rice grains from micronutrient contaminated field soils through the application of siderophore producing synthetic microbial communities (SynComs)
99	Dr. Ankitkumar Jagdishbhai Patel	Environmental Biotechnology	Development of Green, Biodegradable Antimicrobial Coatings from Ricinoleic Acid for Infection-Resistant Medical Devices
100	Dr. Bhavtosh A. Kikani, Dr. Chirayu Desai	Environmental Biotechnology	Integrated photoautotrophic microbial biorefinery for carbohydrate-rich food wastewater treatment and biomass valorization into high value bioproducts using a circular economy approach
101	Dr. Vaibhav R. Pawar (Resubmitted)	Environmental Biotechnology	Microbial soil-improvement for expansive subgrades
102	Dr. Mukul Jain	Healthcare Biotechnology	Investigating Long COVID-associated blood-based protein signatures as risk factors for brain health decline and dementia in adults of Gujarat