

Scientist requirement: RCB-NABI PhD Student of 2025-July (Monsoon semester) Batch (9th Batch)

S. N.	Scientist Name	Requirement	Fund	Tentative research project	Total PhD registered*	Eligible for registration
1.	Vikas Rishi, Sci-G	1	Own	Genome biases in polyploid wheat: Structure-function relationship among bZIP transcription factors from A, B and D genome	7	
2.	Joy K Roy, Sci-G	1	Own	Molecular mechanism of phosphorylation of metabolic genes in resistant starch production	6	
3.	Ajay K Pandey, Sci-F	1	Own	Targeted modulation of IronMan1 expression in hexaploid wheat for the analysis of tissue-specific responses	6	
4.	Siddharth Tiwari, Sci-F	2	Own	1. Nutritional improvement of banana using modern biotechnological tools 2. Development and implementation of genome editing tools for crop improvement	5	
5.	Shrikant S Mantri, Sci-F (Computational Biology)	3	2 Own + 1 Core	1. Own fellowship for Computational Biology project (tentative): Discovering Health-Boosting Insights: Multi-Omics Big Data Mining for Novel Patterns and Pathways 2. One own fellowship for Computational Biology project (tentative): Deep learning neural network model development for biological predictions and data mining. 3. One NABI Core fellowship for Computational Biology project (tentative): Bioprospecting for novel specialised metabolites: Utilising potential of genome and metagenome mining for nutritional and health enhancement through novel patterns.	0	
6.	Kanthi Kiran Kondepudi, Sci-F	2	Own	1) Understanding the role of surface layer proteins and metabolites from the gut commensal bacteria on metabolic health 2) Deciphering the role of microbial Beta-Glucan in improving metabolic health (Systems Medicine Approach)	5	
7.	Koushik Mazumder, Sci-E	1	Own	Edible coating and understanding the molecular basis of delayed fruit ripening	3	
8.	Nitin Kumar Singhal, Sci-E	2	Own and Core	1. Plant-Derived Exosomes Modified with Aptamers for Targeted Delivery of Therapeutics	5	

				2. Point-of-Care Detection of Ferritin and Vitamin B12 Using an Aptamer-Based Lateral Flow Assay		
9.	Rita Sharma, Sci-E	1	Own	Leveraging genetic diversity to evaluate micronutrients and bioactive metabolites in sorghum	4	
10.	Sivasubramanian R, Sci-D	1	Own		3	
11.	Amit Kumar Rai, Sci-D	1	Own	Understanding the role of multifunctional peptides from plant based protein rich fermented products in prevention of selected metabolic disorder	3	
12.	Rajeev Nayan Bahuguna, Sci-D	2	Own	1. Exploring genetic regulation of maintenance respiration in rice under heat stress. 2. Deciphering genetic control of carbon dioxide responsiveness in direct-seeded rice to improve yield and grain nutrients under warmer climate.	3	
13.	Charanpreet Kaur, Sci-D	2	Own	1.Exploring wild rice phyllosphere and seed microbiome for sustainable agriculture 2. Exploring the role of prion-like proteins in plant-microbe interactions	2	
14.	Nimaichand Salam, Sci-D	2	Own	1. Dietary Patterns and Gut Microbiome Composition among North Indian Population: Implications for Metabolic Health and Nutritional Interventions 2. Leveraging Soil Microbial Processes for Bioenergy Production: Exploring Carbon Transformation in Agroecosystems.	3	
15.	Sanjana Negi, Sci-C	1	Own	Investigating the roles of transcription factors in the nutritional improvement and stress tolerance in banana	3	
16.	Vanish Kumar, Sci-C	2	Own	1. Development of electrospun nanofibers based sensing platforms for food contaminants detection 2. Development and exploration of Kombucha-based value added products	3	
17.	Shivraj Nile, Sci-C	2	Own	1. Bioprospecting of indigenous plant-based colorants through callus culture-based biomanufacturing for functional food and nutraceutical applications 2. Exploring edible fruit-derived exosome-like nanoparticles for a dual-action strategy to modulate gut microbiota and counteract colorectal cancer (CRC) progression	2	

18.	Sandeep Kumar, Sci-C	1	Own	Structure-Guided Engineering of Industrial Biocatalysts for Enhanced Efficiency in Biomanufacturing Processes	2	
19.	Sasikumar Elumalai, Sci-E	2	Own	Enzyme hydrolysis and docking studies for lignin depolymerization	2	
20.	Jayeeta Bhaumik, Sci-E	1	Own	Lignin valorization via biocatalytic depolymerisation; lignin based biopharmaceuticals	5	
21.	Meena K. Choudhary, Sci-C	1	Own/Core	Valorisation of Corn Protein Meal by fermentation for Functional Food Applications	0	
	Total	32	30 with Fellowship and 2 under NABI Fellowship			

*RCB does not count co-guide