

Completed Research Grants (2008 – 2025)

S. No.	Title	Agency	PI, Co-PI's	Duration	Status
1	Virtual Centre of Excellence: Multi-disciplinary approaches aimed at intervention of Mycobacterium tuberculosis	DBT	Syed E. Hasnain (UoH)	2008-2013	Completed
2	Small molecule inhibitors of mycobacterial menaquinone biosynthetic pathway enzymes as novel anti - tubercular agents	CSIR	Anil K.Krutiventi, Ritta Mathew	2009-2011	Completed
3	Virtual Centre of Excellence on Multidisciplinary approaches aimed at interventions against Mycobacterium tuberculosis (Phase 1), Project: Molecular inhibitors targeting essential enzymes like Chorismate mutase as potential new drug(s).	DBT	Manojit Pal Parimal Misra Syed E Hasnain	2009-2014	Completed
4	Phosphoproteomic analysis of tyrosine kinase signaling	DST (SERB)	Kiranam Chatti	2009-2012	Completed
5	Investigating the role of 9-O-acetylated sialic acids during early embryonic development	DST (SERB)	Anilkumar Challa	2009-2012	Terminated (PI relocation)
6	Identification and Characterization of PTEN regulators	DBT	Subba Reddy Maddika	2009-2012	Transferred (PI relocation)
7	Design, Synthesis, and Biological Evaluation of Pharmaceutically Acceptable PTP-1B Inhibitors	DST (SERB)	Sreedhara Voleti, Ghanshyam Swarup (CCMB)	2010-2013	Completed
8	Dual Conjugation of Cationic Lipids and Cell Penetrating Peptides to dsRNA Oligonucleotides for In Vivo siRNA Delivery	DBT	Prasenjit Mitra, Rajamohan Poondra, Pradeep Kumar P (IIT-B)	2010-2013	Completed
9	Study the role of protein tyrosine phosphatase non-receptor type 18 (PTPN 18) in regulation of localization of histone deacetylase 4 (HDAC4)	DST (SERB)	Arunasree Kalle	2010-2013	Terminated (PI relocation)
10	Embryonic zebrafish as a model system to study the expression and role of breast tumour kinase	DBT	Kiranam Chatti	2010-2013	Completed
11	Understanding the role of PHLPP in IFN γ -mediated innate immune responses of macrophages	DBT	Kishore Parsa Nasreen Ehtesham Syed E Hasnain (IIT-D)	2010-2013	Completed
12	Molecular analysis of the role of PHLPP1 in macrophage inflammatory response	CSIR	Kishore Parsa	2010-2013	Completed
13	Rational design and synthesis of novel antibiotics against drug resistant bacteria	DST (SERB)	Marina S. Rajadurai	2010-2013	Completed

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14	Palladium mediated synthesis of heterocyclic compounds of potential biological interest	DST (SERB)	Manojit Pal Rajmohan P	2010-2013	Completed
15	A Chemical Biology Approach to Discover Allosteric Modulators of Glucagon Like Peptide-1 Receptor (GLP-1R)	DST (SERB)	Prabhat Arya Prasenjit Mitra	2010-2013	Completed
16	Synthesis of novel drug-like scaffolds by diastereoselective intra-molecular aza-Diels-Alder cyclization based on α -aminoacid and vanillin precursors	DST (SERB)	Neelima D. Tangellamudi	2010-2013	Completed
17	Design, synthesis and identification of phosphodiesterase 4 (PDE4) inhibitors possessing improved safety profile	DBT	Manojit Pal Kishore Parsa	2010-2011	Completed
18	A Suppressor screen to uncover novel functions of fission yeast S.pombe sirtuin Hst4	DBT	Devyani Haldar	2010-2013	Completed
19	Understanding the Transcriptional Regulation and Identification of global regulators of PE/PPE genes of Mycobacterium tuberculosis	DBT	Vaibhav Vindal (UoH) K. Mohareer	2011-2013	Completed
20	Development of Nature-Inspired Small Molecules to Modulate Prostaglandin Pathway: Exploration of Haematopoietic Stem Cell Biology in Zebrafish	DST (SERB)	Rajamohan Poondra, Kiranam Chatti	2011-2014	Completed
21	Identification of novel Akt-interacting partners and investigation of their role in LPS-induced macrophage inflammatory response	DAE	Kishore Parsa	2011-2014	Completed
22	Understanding the role of transcriptional co-activator binding protein PIMT in the control of hepatic gluconeogenesis	DBT	Parimal Misra Kishore Parsa	2011-2014	Completed
23	Synthesis of Fluorescent Saccharide Sensors as Potential Tool for the Diagnosis of Carbohydrate Metabolism Disorders	CSIR	Marina S. Rajadurai	2011-2014	Completed
24	A yeast based screen for discovery of novel sirtuin inhibitors as anti-cancer agents	DBT	Devyani Haldar Manojit Pal	2011-2013	Completed
25	A Chemical Biology Approach to Discover Allosteric Modulators of Sirtuins and to Understand their Mode of Action	DBT	Prabhat Arya Parimal Misra Arunasree K	2011-2013	Completed
26	Development of a non-invasive method using saliva from patients for detection of a early onset of type 2 diabetes	ICMR	Prasenjit Mitra S. Ahmed Ibrahim (NIN) Anupama Row (UoH)	2011-2013	Completed

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27	Regulation of Breast Tumour Kinase (BRK) activity by its alternately spliced form Im5	CSIR	Kiranam Chatti	2011-2012	Completed
28	Molecular analysis of the functional role of miR-7 in β -cells	DST (SERB)	Kishore Parsa	2012-2015	Completed
29	Identification of quorum sensing regulators in Mycobacterium tuberculosis	DST (SERB)	Krishnaveni Mohareer	2012-2015	Completed
30	Natural product-inspired macrocyclic architectures: Novel therapeutic agents in medicinal chemistry	DST (SERB)	Naveen Mulakayala	2012-2015	Terminated (PI relocation)
31	Understanding Cut4 and PknA phosphorylation in biofilms of Mycobacteria	DST (SERB)	Ritta Mathew	2012-2015	Transferred (PI relocation)
32	Developing and validating a single protocol based zebrafish model for preclinical safety assessment of nanotherapeutics	DBT	Pushkar Kulkarni Kiranam Chatt	2013-2016	Completed
33	Synthesis of marine natural products based compounds of potential biological significances	MoES	Manojit Pal J. Iqbal Rajmohan Poondra	2013-2014	Completed
34	Understanding the functions of Selective AMPK γ Modulators (SAMPK γ M) in dissecting the pharmacological role of different AMPK isozymes in metabolic diseases	DBT	Parimal Misra Rajmohan Poondra Sreedhara R Voleti	2014-2017	Completed
35	Design and development of novel phosphodiesterase 4 (PDE4) inhibitors	DBT	Manojit Pal Kishore Parsa	2014-2016	Completed
36	Identifying and characterizing noncoding RNA regulators of chromatin in S.pombe	SERB	Aarti Sevilimedu	2014-2017	Completed
37	Synthesis of nitrogen containing heterocycles via multicomponent reactions (MCRs) and their evaluation against pharmacological targets.	CSIR	Manojit Pal Kishore Parsa	2014-2017	Completed
38	Hybrid Natural Products to Hunt for Functional Small Molecules	SERB	Prabhat Arya	2015-2018	Completed
39	Elucidation of PHLPP1 signaling during macrophage activation: Requirement of domains and identification of stimulus specific interaction partners	CSIR	Kishore Parsa Kiranam Chatti	2015-2018	Completed
40	Chemistry and Biology of Protein Tyrosine Phosphatases	Canada-Israel Joint Initiative	Ari Elson Weizmann Institute, Israel Prabhat Arya	2016-2019	Completed

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41	Latrunculin and Eribulin Sub-structures Derived Macrocyclic Toolbox	MoES	Prabhat Arya Kiranam Chatti	2016-2019	Completed
42	Investigation of the regulatory role of miR-712 in inflammation induced skeletal muscle insulin resistance	SERB	Kishore Parsa Parimal Misra Sriram Seshadri (Nirma University)	2016-2019	Completed
43	Universal Polymer Matrix for the Synthesis of Catalytically Active Nanocomposites. Active Nanocomposites Embedded into Hyperbranched Polymer Matrix as Green and Reusable Catalysts for Diverse Catalytic Transformations.	DST	Manojit Pal Marina Rajadurai Zinaida Shifrina Nina Kuchkina (INEOS Russia)	2016-2018	Completed
44	Expertise in Advanced Organic Synthesis and Med Chem	Karolinska Institute, Sweden	Prabhat Arya	2016-2018	Completed
45	Elucidating the molecular links between nutrition, reproduction, and aging	DST-INSPIRE	Manjunatha Thondamal	2016-2021	Transferred (PI relocation)
46	A mechanistic study of the recruitment of the nuclear RNAi machinery for de novo establishment of heterochromatin domains in S.pombe.	DBT	Aarti Sevilimedu Kiranam Chatti	2016-2019	Completed
47	Understanding the functional role of ser/thr phosphatase PHLPP in inflammation/ER stress induced insulin resistance	DBT	Kishore Parsa Parimal Misra Prakash Babu (UoH)	2016-2019	Completed
48	Understanding the functional role of co-activator binding protein in myogenesis	SERB	Parimal Misra Kishore Parsa	2017-2020	Completed
49	Novel small molecules as selective and positive allosteric modulators (PAM) of 5HT2c receptor: Discovery and development of potential anti-obesity agents (F. No.VI-D&P/565/2016-17/TDT): Design and synthesis of 5HT2c agonists are undertaken for the identification of novel anti-obesity agents.	DST	Manojit Pal Parimal Misra Prem Yadav (CDRI)	2017-2020	Completed
50	12R-Lipoxygenase as a target for development of drugs against psoriasis (F.No.VI-D&P/560/2016-17/TDT): Design and synthesis of 12R LOX (lipoxygenase) inhibitors are undertaken for the identification of novel agents that could be useful for the treatment of psoriasis.	DST	Manojit Pal Prof. Reddanna Nuruddin (UOH)	2017-2020	Completed, but 6 months no cost extension
51	Potent and selective PDE4B inhibitors for the potential treatment of arthritis	DBT	Manojit Pal Kishore Parsa Dr. Rasool (VIT)	2018-2021	Completed

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52	Design synthesis and evaluation of novel hybrid incretins to ameliorate Type 2 Diabetes	SERB	Prasenjit Mitra Vishal Rai (IISER, Bhopal) Syed Ahamed Ibrahim (NIN)	2018-2021	Completed
53	Design, Synthesis and Evaluation of Novel Bioactive Peptides to Ameliorate Type 2 diabetes and Obesity	SERB	Prasenjit Mitra S. Ahmed Ibrahim (NIN)	2018-2021	Completed
54	Generation of transgenic zebrafish expressing human tyrosine kinase mutants as human glioma (brain cancer) models.	DBT	Kiranam Chatti Zeclinics	2018-2020	Completed
55	Synthesis of Anticancer Drug Trabectedin and Related Analogues	SERB	Ramesh Samineni	2020-2022	Terminated (PI relocation)
56	Design synthesis and evaluation of novel hybrid incretins to ameliorate Type 2 Diabetes	SERB	Prasenjit Mitra Vishal Rai (IISER, Bhopal) Syed Ahamed Ibrahim (NIN)	2018-2021	Completed
57	Design, Synthesis and Evaluation of Novel Bioactive Peptides to Ameliorate Type 2 diabetes and Obesity	SERB	Prasenjit Mitra S. Ahmed Ibrahim (NIN)	2018-2021	Completed
58	Generation of transgenic zebrafish expressing human tyrosine kinase mutants as human glioma (brain cancer) models.	DBT	Kiranam Chatti Zeclinics	2018-2020	Completed
59	Synthesis of Anticancer Drug Trabectedin and Related Analogues	SERB	Ramesh Samineni	2020-2022	Terminated (PI relocation)
60	Design synthesis and evaluation of novel hybrid incretins to ameliorate Type 2 Diabetes	SERB	Prasenjit Mitra Vishal Rai (IISER, Bhopal) Syed Ahamed Ibrahim (NIN)	2018-2021	Completed
61	Design, Synthesis and Evaluation of Novel Bioactive Peptides to Ameliorate Type 2 diabetes and Obesity	SERB	Prasenjit Mitra S. Ahmed Ibrahim (NIN)	2018-2021	Completed
62	Generation of transgenic zebrafish expressing human tyrosine kinase mutants as human glioma (brain cancer) models.	DBT	Kiranam Chatti Zeclinics	2018-2020	Completed
63	A Microneedle Transdermal Patch for Supplementing Critical Micronutrients for Prevention and Control of Anemia	DBT	M. Rajadurai, Parimal Misra, Bindiganavale R. Shamanna (UoH) Anitha C. T. (UoH)	2020-2023	Completed

64	Identification of the mechanistic basis of early striatal damage in Glutaric Aciduria Type I	DBT	Aarti Sevilimedu, Pushkar, Radha Rama Devi	2018-2021	Completed
65	Use of DNazymes to improve CRISPR-mediated knock-in	DBT GET	Kiranam Chatti, Aarti Sevilimedu	2018-2021	Completed
66	Molecular analysis of the functional role of ser/thr phosphatase PHLPP in lipid induced formation of foam cells, a hallmark of atherosclerosis	DBT	Kishore Parsa, Kiranam Chatti	2019-2022	Completed
67	Identification of optimal therapeutic window for efficacious intervention in a Zebrafish model of Fragile X syndrome.	DBT	Aarti Sevilimedu, Kiranam Chatti, Pushkar Kulkarni	2019-2022	Completed
68	Developing a Wearable, Light-Concentrating, Photonic Micro-Sphere Patch for On-the-Go Outdoor/Indoor Photodynamic Therapy	HEFA	R. Chandrasekar (UoH), M. Rajadurai	2023-2025	Completed
69	Molecular characterization of the functional role of ser/thr phosphatase PHLPP in pancreatic beta cells to gain mechanistic insights into diabetes	SERB	Kishore Parsa Parimal Misra, Pushkar Kulkarni, Prakash Babu (UoH) Sasiskala M (AIG-AHF)	2020-2023	Completed
70	Understanding the functional role of co-activator binding protein PIMT in adipogenesis and obesity	DBT	Parimal Misra, Kishore Parsa, Satyamoorthy, Manjunath Joshi (MAHE)	2020-2023	Completed
71	Studies on the role of HDAC inhibitors in reprogramming cancer cell metabolism to reverse cisplatin resistance in patient derived xenograft model of ovarian cancer.	ICMR	Prasenjit Mitra, Manjunath Joshi, Naveena AN Kumar, Vasudha Devi (MAHE)	2021-2024	Completed
72	Understanding the regulatory role of co-activator binding protein PIMT in the pancreatic b-cells of diabetic animals and T3C diabetic (Chronic pancreatitis) humans	DST-SERB	Parimal Misra, Kishore Parsa, Partha Chakrabarti (IICB, Kolkata), Sasikala M (AIG)	2021-2024	Completed
73	Functional Analysis of PHLPP1 in Myogenesis: Implications for skeletal muscle dystrophies	DBT	Dr. Kishore Parsa (PI), Co-PIs: Dr. Aarti Sevilimedu and Dr. Kiranam Chatti	2022-2025	Completed
74	Molecular Insights into Ligand-selective and Cholesterol-specific Activation of the GPCR Serotonin1A Receptor with GPU-enabled High-performance Computing grant	DST-SERB	Dr. Sandipan Chakraborty (PI), Co-PI: Prof. Amitabha Chattopadhyay (CCMB)	2021-2024	Completed
75	A pre-clinical lead optimization study of adjunct medicaments for		Prof. Hasnain (Coordinator), Dr.	2022-2025	

	reducing duration and increasing efficacy of anti-tuberculosis drug therapy	DBT	Manojit Pal (PI), Dr. Nasreen Ethesham (PI), Co- PIs: Dr. Parimal Misra and Dr. Kishore Parsa		Completed
76	Investigating the role of nutrient dependent O-linked Glycosylation of SIRT6 in regulating hepatic functions and physiology.	SRG-SERB	Dr. Tandrika Chattopadhyay	2024- 2026	Completed