

Ongoing Projects during the Financial Year 2023-24

Sr. No.	Project Code	Title and scope of the Projects	Sponsoring Agency	Project leader
1	BICB	Establishment of Bioinformatics and Computational Biology Center at National Institute of Immunology, New Delhi with the theme of 'Structural bioinformatics & genome mining (Applications in biomedical Sciences)'	DBT	Dr. Debasisa Mohanty
2	ICTP	Immunoengineering: Cell therapy platform/Human Immunology program	DBT	Dr. Debasisa Mohanty
3	CDCS	Charting a dendritic cell signaling network modulating intestinal inflammation	DBT	Dr. Soumen Basak
4	CNGV	INCENTIVE: Indo-European consortium for next generation influenza vaccine innovation	DBT	Dr. Prafullakumar B. Tailor
5	CTLS	Systems biology approaches to understand the biology of human CD4+helper T cells with cytotoxic potential (CD4-CTLs) in viral infections	DBT WELCOME	Dr. Veena S Patil
6	DBAG	Designing Bispecific CAR-NK cell targeting Alpha-fetoprotein (AFP) and glypican-3 (GPC-3) present in Hepatocellular carcinoma (HCC)	DBT	Dr. Prafullakumar B. Tailor
7	NTPR	Nanotechnology-based Immuno-therapeutic Platform for Reprogramming of Anti-tumor Immune Network	DBT	Dr. Santiswarup Singha
8	TDNB	Towards development of nanomaterial based apta-sensor for detection of gut microbiota-derived metabolites biomarkers M K Bhan-Young Researcher Fellowship Program (M K Bhan-YRFP-2021)	DBT	Dr. Payal Gulati
9	UDCG	Understanding the dynamic changes in gene expression pattern in neonatal sepsis	DBT	Dr. Veena S Patil
10	URTD	Understanding the role of PKM2 in transcriptional dysregulation during malignant transformation	DBT	Dr. Sanjeev Das
11	DTCB	Establishment of Data and Impact Analysis Unit for projects in the area of Theoretical and Computational Biology	DBT	Dr. Debasisa Mohanty
12	DGMC	Detection of gut microbiota-derived metabolites Colibactin, 4-ethylphenyl sulfate and p-Cresyl through molecularly imprinted polymer-based electrochemical sensor development	DHR	Dr. Anil Kumar
13	IFPS	DST'S INSPIRE Faculty Award Programme	DST	Dr. Priyanka Shukla
14	TEPT	Translational Research Consortium for establishing platform Technologies to support prophylactic and Therapeutic strategies for dengue discovery to proof-of-concept	BIRAC	Dr. Nimesh Gupta
15	MSMV	Multi - stage malaria vaccine candidates for the prevention of Plasmodium falciparum infection in mosquito and pre-erythrocytic development in man	BIRAC	Dr. Agam Prasad Singh
16	BLMH	Understanding the mechanism by which BLM helicase regulates ATM mediated response to Ionizing Irradiation	BRNS	Dr. Sagar Sengupta
17	CSIR	CSIR Fellowship	CSIR	Students
18	SSBA	Shanti Swarup Bhatnagar Special Honorarium	CSIR	Dr. Pushkar Sharma, Dr. Sanjeev Das, Dr. S. Basak
19	ICMR-F	ICMR Fellowship	ICMR	Students
20	NCCSF	DBT NCCS Fellowship	NCCS	Students
21	EIPD	Enteropathogenic infections predispose to the development of inflammatory bowel disease (IBD) in diet-induced obesity: Deciphering the " Microbiota code"	RCB	Dr. Devram Sampat Ghorpade
22	NRTC	Nano-immunotherapeutic Approach for Reprogramming of Tumor Cells to Induce Sustainable Anti-tumor Immune Response	RCB	Dr. Santiswarup Singha

23	DIFA	Inspire Fellowship JRF Programm	DST	Ms.Alvina Deka, Ms.Witty Tyagi, Ms. Simran Motwani, Ms.Rashi Mittal
24	DMHR	Determine whether mitochondrial helicase RECQL4 affects SIRT3 activity by regulating OXPPOS Complex I stability and assembly	SERB	Dr. Sagar Sengupta
25	ESHP	Elucidating the structure-function of Helicobacter pylori N-carbamoylputrescine amidase and to design structure-based inhibitor	SERB	Dr. Apurba Kumar Sau
26	IFAP	DST'S INSPIRE Faculty Award Programme	DST	Dr. Archana Pant
27	IRMT	Investigate into the role of alternate respiratory electron carrier polyketide quinone in pathophysiology of Mycobacterium tuberculosis	SERB	Dr. Debasisa Mohanty
28	MBNT	Microbiota based nutritional therapy: New arsenal to fight Toxoplasma gondii treatment associated obesity	SERB	Dr. Tanmay Majumdar
29	MRNG	MicroRNA nanotherapeutics for glioblastoma	SERB	Dr. Sagar Sengupta
30	NSAP	Nano-scale Artificial Antigen Presenting Cells to Reprogram the Tumor Antiogenesis	SERB	Dr. Santiswarup Singha
31	RMPD	Regulation of malaria parasite division by protein phosphorylation	SERB	Dr. Pushkar Sharma
32	URLC	Understanding the Role of Liver-secreted Cysteine-Rich with EGF-like Domains 2 (CRELD) in Diabetes	SERB	Dr. Devram Sampat Ghorpade
33	URTR	Understanding the role of HDAC5 in transcriptional reprogramming during tumorigenesis	SERB	Dr. Sanjeev Das
34	JCRP	J C Bose award Fellowship Renewal to Dr. Pushkar Sharma	SERB	Dr. Pushkar Sharma
35	ESMM	Elucidation of the Signalling and Modulatory Mechanisms for mTORC2-mediated Regulation of Sphingolipid Biosynthesis.	ICMR	Mr. Mohammad Nafees Ansari
36	UPOA	Understanding the pathophysiological links between Osteoporosis and Alzheimer's disease	SERB	Dr. Sarika Gupta
37	DMCT	Determining the mechanism and consequences of inter-regulation between two tumor suppressors: p53 and BLM helicase	DBT	Dr. Sagar Sengupta
38	MSHP	Molecular basis for the function of protein tyrosine phosphatase SHP2	SERB	Dr. Senthil Kumar
39	TCRB	Effect of Altered orientation of CTCF binding sites on Chromatin organization and VDJ recombination at TCRb locus	DBT	Dr. Madhulika Srivastava
40	RPCC	Regulation of Plasmodium Cell Cycle and Cell Division by Protein Phosphorylation	DBT WELCOME	Dr. Pushkar Sharma
41	DENV	Structure-based design of small molecule inhibitors that target the E protein of DENV	ICMR	Dr. G. Senthil Kumar
42	GSGC	Genomic Surveillance for SARS-CoV-2 In India: Indian SARS-CoV-2 Genomics Consortium (INSACOG)-Phase-II	DBT	Dr. G. Aneeshkumar Arimbasseri
43	EPTB	Towards an evidence-based regimen for treating extra-Pulmonary Tuberculosis (EPTB)	DBT	Dr. Aneeshkumar G. Arimbasseri
44	MPSM	Modulation of protein aggregation by excipients designed with high specificity for the misfolded states	SERB	Dr. Sarika Gupta
45	DRCM	Deciphering how RICTOR/TORC2 regulates one-carbon metabolism to modulate longevity depending on diet containing different Vitamin B12 content	SERB	Dr. Arnab Mukhopadhyay
46	GLMS	Glycoproteomic profiling of O-glycosylation of leukosialin (CD43/ sialophorin) by mass spectrometry and its role in immunological processes	SERB	Dr. Srinivasa Gopalan Sampathkumar

47	TINB	"Targeting liver-to colon inflammatory axis", a novel strategy to limit diet triggered Inflammatory bowel disease development	ICMR	Dr. Devram Sampat Ghorpade
48	MSPD	Mxenes (Ti3AlC2) assisted 2D material wearable electronic sensor for monitoring the motor symptoms of Parkinson's disease	SERB	Dr. Sarika Gupta
49	UMCD	Understanding the mechanism of muscle mass maintenance in mice lacking vitamin D receptor by a customised diet	DBT	Dr. G. Aneeshkumar Arimbasseri
50	UMDB	Understanding the interplay between metabolism, immune system and gut-microbiota in development of double burden of malnutrition	DBT	Dr. G. Aneeshkumar Arimbasseri
51	DSBP	Development of Synthetic Binding Proteins as Antibody Mimetic	ICMR	Dr. G. Senthil Kumar
52	RGNC	Regulation of neurodegeneration by non-coding RNA	DBT	Dr. Pushkar Sharma
53	SDSP	Structural and Dynamic studies of SARS-Cov-2 proteins	DBT	Dr. G. Senthil Kumar
54	NPNI	National Network Project of National Institute of Immunology, New Delhi	DBT	Dr. Debasisa Mohanty
55	AMTB	Annihilating the function of Histidine metabolic pathway of Mycobacterium tuberculosis for developing new anti-TB molecules	DBT	Dr. Bichitra Kumar Biswal
56	MTBC	Whole Genome Sequencing of MTB Clinical Strains for Determining Drug Resistance and Strain lineage in India: A structured Nationwide approach	DBT	Dr. Debasisa Mohanty
57	DTMA	Development of therapeutic broadly neutralizing monoclonal antibodies against circulating HIV-1 clade C in children and adults	DBT	Dr. Anil Kumar
58	MBPC	A Molecular Basis for Assembly- Stimulated Second Phosphate Cleavage of Gtp in A Unique Large Gtpase HGBP1	CSIR	Dr. Apurba Kumar Sau
59	UDBM	Understanding the association and underlying molecular mechanisms of early life 'Double-burden' of malnutrition and non communicable disease risk in adolescence	DBT	Dr. Arnab mukhopadhyay
60	JCAM	J C Bose Fellowship to Dr. Arnab Mukhopadhyay	SERB	Dr. Arnab Mukhopadhyay
61	GSRE	The Genetic Screen of Chromatin "Readers" and "Erasers" proteins in DNA Damage Response pathway	RCB	Dr. Rajesh Kumar Yadav
62	EATV	Evaluation of the Efficacy of Albumin Gene Therapy Using Adeno Associated Virus 3 Vectors in animal models of Cirrhosis	DBT	Dr. Nagarajan Perumal
63	NPIT	National Network Project of Indraprastha Institutes of Information Technology Delhi	DBT	Dr. Debasisa Mohanty
64	HITD	Helix Invasive approach for targeting of duplex DNA for genetic therapy	SERB	Dr. Chhuttan Lal Meena
65	RSNA	Recalibration of co-stimulatory signals using nano-scale artificial antigen-presenting cells to promote tumor-specific CD8+ T-cells activation	ICMR	Dr. Santiswarup Singha

Closed Projects during the Financial Year 2023-24

Sr. No.	Project Code	Title and scope of the Projects	Sponsoring Agency	Project leader
1	ADMC	Generation, Characterization and biological relevance of autoantibodies directed against apoptotic cells	DBT	Dr. Rahul Pal/ Dr. Om Singh
2	AMIC	Apoptosis in Male Infertility and male Contraception:- Molecular dissection of pathways of induction and execution of cell death in germ cells (Indo-US-)	DBT	Dr. Chandrima Saha
3	AND	Mechanistic Studies and inhibitor design for Amyloidosis and neurodegenerative disorders	DBT	Prof. A. Surolia
4	BBG	Development of DNA Probes for Detecting Monomorphic and polymorphic loci in bubalis Bubalis Genome	DBT	Dr. Sher Ali
5	BEFG	Expression of foreign gene of biomedical importance in Heterologous expression systems	DBT	Dr. Sher Ali
6	BLM	Determining the role of BLM helicase (HELICASE) during signal transduction in humans	DBT	Dr. Sagar Sengupta/ Dr. Vinay Kr. Nandicoori
7	BPF	Scale up and evaluation of biodegradable Polymer particle formulations for single dose vaccine	DBT	Dr. A.K. Panda Dr. Ayub Qadri
8	CDK	Role of Cyclin Dependent Kinases in neuronal apoptosis	DBT	Dr. Pushkar Sharma
9	CEHC	Project I: Harnessing combinatorial Peptide Scaffolds and organic molecular specificities for the design of new chemical entities as inhibitors for decimating pathogens	DBT	Dr. A. Surolia
10	CEMP	Core Grant - DBT Centre of Excellence for Novel Paradigms of inhibitor design against key metabolic pathways to decimate infectious agents	DBT	Dr. A. Surolia
11	CFRV	Comprehensive analysis of the follicular helper T cell repertoire in flavivirus infection and vaccination	DBT	Dr. Nimesh Gupta
12	CITG	Canada-India Training the next generation of Innovators and Researchers programme held on 25th February, 2014 at NII	DBT	NII
13	CPO	Contraceptive Potential of Oocyte-restricted ePLA2g	DBT	Dr. Anil K. Suri
14	CTMA	Construction of Transgenic mice - An animal for dynamic mutation	DBT	Dr. Subeer Majumdar
15	CTTA	Characterization of cytotoxic intermediates and deciphering the underlying mechanism of cell toxicity in Transthyretin related Amyloidosis	DBT	Dr. Sarika Gupta
16	DBM	Dissenting biochemical mechanisms of the melanocyte and melanin disappearance in vitiligo	DBT	Dr. Rajesh S. Gokhale
17	DSBH	Determining the role of BLM helicase in DNA Damage Signal recognition and transduction due to double strand Breaks in Human	DBT	Dr. Sagar Sengupta
18	DSSI	Design and Synthesis of Sortase inhibitors	DBT	Dr. Rajendra P. Roy
19	EMT	Restriction analysis and Epitope Mapping of Two human T cell stimulating antigens of mycobacterium tuberculosis with respect HLA class-I and II molecules	DBT	Dr. Rajni Rani

20	FDS	Study of functional deficits of the sertoli cell from azoospermic neonatal monkey testis: a natural contraceptive states	DBT	Dr. Subeer S. Majumdar
21	FDFB	33rd Foundation day function of the Department of Biotechnology	DBT	Meeting
22	FPD	Identification of Novel gene(s) for familiar Parkinson's disease	DBT	Dr. Ramesh C. Juyal
23	EPI	Encapsulation of Potentially immunotherapeutic/Peptides in novel biocompatible nanosized carriers for targetting delivlery in IDDM	DBT	Dr. Rajni Rani
24	GDMM	Genotype-phenotype relationship in rare genetic disorders: Physicochemical analysis of mutations in GNE myopathy and phenotypic modulation by small molecule effectors	DBT	Dr. Debasisa Mohanty
25	GPTM	Gene editing of key plasmodium transporters and lipid metabolism enzymes to decipher parasite drug resistance mechanisms	DBT	Dr. Pushkar Sharma
26	HCG	Immune responses to an onco-fetal Antigen, LCG: A potential anti-cancer Immunotherapy	DBT	Dr. Om Singh
27	HEV	Characterization of Immunological Response in Hepatitis E Virus Infection	DBT	Dr. Sudhanshu Vrati
28	ICAM	Identification and characterization of an adaptor molecule in clathrin-mediated haemoglobin endocytosis in Leishmania	DBT	Dr Amitabha Mukhopadhyay
29	IDJV	To study the immunogenicity of DNA JEV vaccine in animals by adopting newer approach and conduct pre-clincal studies	DBT	Dr. Sudhanshu Vrati
30	IIEA	Improved Immunogenecity of enterovirus antigen by use of microparticles cassier-a proof of principal study for development of multivalent enterovirus vaccine	DBT	Dr. Amulya Panda
31	IPMC	Identification of the peptide mimics capable of inducing Japanese encephalitis virus neutralizing antibodies	DBT	Dr. Sudhanshu Vrati
32	IVP	To develop methods for in activated vaccine preparation from the virus grown in vero cells and carry out its immunogenicity in mice and RHESMS monkeys	DBT	Dr. Sudhanshu Vrati
33	IVTB	Influence of Impaired Vesicular transport on B cell responses	DBT	Dr. Anna George
34	MBF	Molecular Biology and functions of eosinophil Proteins	DBT	Dr. J.K. Batra Dr. Dinakar M. Salunke
35	MRA	Methotrexate in Rheumatoid Arthritis Pharmacogenetics and clinico-Immunological correlates	DBT	Dr. Ramesh C. Juyal
36	NDT	Eukryotic like serine/threonine Protein Kinase G.from M.tuberculosis: Functional characterization and identification of Novel Downstream Targets	DBT	Dr. Vinay.K. Nandicoori
37	NSP	Non-structural proteins of JEV as oral immunogenes jointly	DBT	Dr. Sudhanshu Vrati
38	PNFP	Engineering analysis of large scale polymeric nanoparticles formulation	DBT	Dr.A.K. Panda
39	RKPD	Role of chromokinesin and kinesin motor proteins in driving chromosomal aberrations	DBT	Dr. Sandeep Saxena

40	RTD	International Round table discussion meeting of proactive Nutrients	DBT	
41	SFAZ	Structural and Functional Attributes of Zona pellucida Glycoproteins during fertilization in humans	DBT	Dr. S.K. Gupta
42	SIGI	International Associated Laboratory in the area of Systems Immunology and Genetics of Infectious Diseases (LIA-SIGID)	DBT	Project Principal Coordinator - Director, ILS, BBSR Co-ordinator - Director, NII
43	MMTP	Mechanisms of stress tolerance in Mycobacterium tuberculosis and its physiological relevance	DBT	Dr. Vinay Nandicoori
44	DBT-Fday	37th Foundation Day of DBT on 26th February 2023 at NII, New Delhi	DBT	
45	UPSC	Centre of Excellence on Molecular Machinery of Plasmodium : Signaling, Autophagy and Ubiquitin Proteasome System (UPS)	DBT	Dr.Pushkar Sharma
46	UPSD	In silico analysis of signaling and Protein-Protein Interaction (PPI) networks in P. falciparum and identification of novel modulators/inhibitors of signalling and PPI	DBT	Dr. Debasisa Mohanty
47	UPSP	Establishment of a road map of signaling and trafficking cascades in malaria parasite - R&D project I	DBT	Dr.Pushkar Sharma
48	SST	Fellowship Of Mr Syed Shamsh Tarbez(DBT-JRF)	DBT Transfer to RCB	Students
49	AKS	Felloship of Amit Kumar Salunki	NCCS	Students
50	DRTS	Determining the roles of mitochondrial bioenergetics and replication in the cancer phenotype of Rothmund Thomas Syndrome (RTS) patients	SERB	Dr Sagar Sengupta
51	ESBM	Comparative analysis of extrinsic signals in bone marrow during marrow generation and maintenance phase	DST	Dr. Asok Mukhopadhyay
52	ICDM	Identification and characterization of dynamin like molecule in bemooglobin endocytosis in leishamania	ICMR	Dr.Amitabha Mukhopadhyay
53	IRPM	Investigating the role of phosphorylation in modulating the cell division and cell wall synthesis in Mycobacterium tuberculosis	SERB	Dr.Vinay K Nandicoori
54	LMPC	Low-cost, multiplex point of care (POC) diagnostic test for differential diagnosis of fever	SERB	Dr. Anil Kumar
55	MCI	DBT-JRF Programme in Biotechnology and Biology	RCB	Mr Manish Chamoli Mr. Bhola Shankar Pradhan Dr Arnab Mukhopadhyay Mr. Amit Kumar Solanki
56	MCPD	Molecular and cellular biology of prostate cancer and Its implications in early Detection and diagnosis	SERB	Dr. Anil Suri
57	MGAP	Molecular genetic analysis of Parkinson's disease in the Indian population	DST	Dr. Ramesh C Juyal
58	PIIP	Plasma fractionation process for production of albumin, immunoglobulin and other products for therapeutic uses	BIRAC	Dr. Ak Panda

59	PSRP	DBT- JRF Fellowship, of Ms. Poonam Singh	NCCS	Ms Poonam Singh
60	SRBC	Signals regulating B cell development and maturation	SERB	Dr. S Rath
61	TRR	Analysis of repeat expansion and Epigenetic modification around Triplet, Repeat Regions using transgenic Mice	CSIR	Dr. Subeer S. Majumdar
62	JCRG	JC BOSE FELLOWSHIP	SERB	Dr. Rajesh S. Gokhale
63	DPHI	Clinical applications of retinal neural like cells (RNLCs) derived from blood of retinitis pigmentosa (RP) patients	DST	Dr. P.K Upadhyay
64	VEPS	A novel vaccine evaluation platform to support SARS-CoV-2 vaccine development in resource-limiting settings	BIRAC	Dr. Nimesh Gupta
65	TGBM	Towards design and development of biosensors for detection for detection of gut bacteria and their metabolites	ICMR	Dr. Anil Kumar
66	IHRC	Immuno-epigenetics study of the humoral immune response in COVID-19 patients from india	SERB	Dr. Nimesh Gupta
67	TURM	Towards understanding the role of gut microbiota and their metabolites in the causation and treatment of colorectal cancer	SERB	Dr. Anil Kumar
68	WSMC	Wastewater surveillance to monitor Covid-19 outbreak	SERB	Dr. Aneeshkumar Arimbasseri
69	DFIP	Development of novel near infrared fluorescence imaging probes for detecting amyloid beta species in eyes of alzheimer's disease animal model	ICMR	Dr. Sarika Gupta
70	NPSK	SERB' National Post Doctoral Fellowship scheme	SERB	Dr. Santosh Kumar
71	TARE	Financial sanction under teachers associateship for research excellence	SERB	Dr. Sagar Sengupta
72	DBT-RA	Fellowship for Dr. Pankhuri Narula (DBT-RA-I)	RCB	Dr. Pankhuri Narula