

Closed Projects during the Financial Year 2021-22

Sr. No.	Project Code	Title and scope of the Projects	Sponsoring Agency	Project leader
1	REFP	Evaluation of radioprotective efficacy and efficacy biomarkers of G-009M and RK-IP-006 formulation in non human primate model	DRDO	Dr. Anil Kumar
2	IFSL	DST'S INSPIRE Faculty Award Programme to DR. Sneha Lata	SERB	Dr. Sneha Lata
3	JCBP	JC BOSE FELLOWSHIP sanctioned to Dr. Pushkar Sharma	SERB	Dr. Pushkar Sharma
4	RFGA	Role of tRNA biogenesis in neuronal gene expression The Ramanujan Fellowship award to Dr. G. Aneeshkumar Arimbasseri	SERB	Dr. Aneeshkumar G Arimbasseri
5	CRIS	Usage of CRISPR-generated isogenic model systems to identify and validate small molecules which can reverse drug resistance	DBT	Dr. Sagar Sengupta
6	UPHI	Understanding the machinery involved in positioning a unique motif of Helicobacter pylori arginase and its implication to design a novel class of inhibitors	DBT	Dr. Apurba Kumar Sau
7	MPFG	Influence of maternal one-carbon (1C) metabolism in placental functional, fetal growth and programming	DBT	Dr. Arnab Mukhopadhyay
8	IRND	Investigating the role of JWA/Arl6ip5/GTRAP3-18 in the regulation of autophagy in neuronal cells and neurodegenerative disorders	SERB	Dr. Sarika Gupta
9	CFRV	Comprehensive analysis of the follicular helper T cell repertoire in flavivirus infection and vaccination	DBT	Dr. Nimesh Gupta
10	LMPC	Low-cost, multiplex point of care (POC) diagnostic test for differential diagnosis of fever	SERB	Dr. Anil Kumar
11	CSPM	Characterization of a cyclin-dependent kinase that interacts with the insulin signaling pathway to regulate germ cell maturation, stress response and aging	SERB	Dr. Arnab Mukhopadhyay
12	MSME	Developing mycobacterium smegmatis for metabolic engineering of delta-decanolactone/or/delta-dodecanolactone	BIRAC	Dr. Rajesh S. Gokhale
13	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
14	RNAP	Role of RNA polymerase III generated non-coding RNAs in myelination	SERB	Dr. Aneeshkumar G Arimbasseri
15	MGCS	Molecular genetic characterization of a protein kinase that regulates insulin signaling (National Bioscience Award)	DBT	Dr. Arnab Mukhopadhyay
16	BFAP	Biochemical and functional analysis of plasmodium HSP40 family protein	ICMR	Mr. Mohammad Kashif
17	DPCR	Development of PCR free, facile luminescence based kit for ultra-sensitive detection of covid-19	DBT	Dr. Sarika Gupta

18	IFRM	DST'S INSPIRE Faculty Award Programme to DR. Ritu Mishra	SERB	Dr. Ritu Mishra
19	DCGT	Delineation of the role of human chorionic gonadotropin in tumor progression	DBT	Dr. Rahul Pal
20	SFUM	To study the macrophage function in T cell-deficient mice and its underlying mechanisms in context of mycobacterium tuberculosis infection	DBT	Dr. Sangeeta Bhaskar
21	ICOR	Influence of CTCF on chromatin organization relevant for regulation of TCRb locus	DBT	Dr. Madhulika Shrivastava
22	RNCD	Regulation of neuronal cell cycle during differentiation and death	DBT	Dr. Pushkar Sharma
23	MNMG	Multi-functional Nanomaterial systems for modulation of glycosylation in animals	DST	Dr. Srinivas Gopalan Sampathkumar
24	IMWH	Investigation into the role of melanocytes in skin wound healing	SERB	Dr. Rajesh S. Gokhale
25	EMTL	Analysis of eRNA at Enhancer Eb of murine TCRb locus	SERB	Dr. Madhulika Shrivastava
26	UMTL	Unraveling the molecular mechanism of the transfer of octanoyl chain from C8-ACP to the lipoyl domains by the lipoate protein ligases B of Leishmania	SERB	Dr. Monica Sundd
27	DPMC	Determining whether ubiquitylation of proteins on mitochondrial outer membrane negatively controls their entry into the organelle	SERB	Dr. Sagar Sengupta
28	MSGD	Defining the molecular specificity in interferon regulatory factors leading	SERB	Dr. Prafullakumar B Tailor
29	RGMP	CRISPR-Case9 ribonucleoprotein-based genome editing to elucidate the mechanism of pathology of RNA modification enzyme mutations	DBT	Dr. Aneeshkumar G Arimbasseri
30	EFTH	To Evaluate the effectiveness of foamy virus mediated gene delivery and strategies to induce transgene tolerance in a mouse model of haemophila A	DBT	Dr. Prafullakumar B Tailor
31	ENSC	Investigating the engagement of the NF-kB system during Chandipura virus infections	DBT	Dr. Soumen Basak
32	GPTM	Gene editing of key plasmodium transporters and lipid metabolism enzymes to decipher parasite drug resistance mechanisms	DBT	Dr. Pushkar Sharma
33	IFAL	DST'S INSPIRE Faculty Award Programme	SERB	Dr. Anismrita Lahon
34	MMTP	Mechanisms of stress tolerance in Mycobacterium tuberculosis and its physiological relevance	DBT	Dr. Vinay Kumar Nandicoori
35	JCBV	JC BOSE FELLOWSHIP	SERB	Dr. Vinay Kumar Nandicoori

Ongoing Projects during the Financial Year 2021-22

Sr. No.	Project Code	Title and scope of the Projects	Sponsoring Agency	Project leader
1	IFEK	DST'S INSPIRE Faculty Award Programme	SERB	Dr. Ekjot Kaur
2	CRP	Indo-UK collaboration Research Project on Biotechnology Cancer Research Programme	DBT	Dr. Anil Kumar Suri
3	JCRG	JC BOSE FELLOWSHIP	SERB	Dr. Rajesh S. Gokhale
4	UPSC	Centre of Excellence on Molecular Machinery of Plasmodium : Signaling, Autophagy and Ubiquitin Proteasome System (UPS)	DBT	Dr. Pushkar Sharma
5	PSVP	Peptide based submit vaccine against clostridium perfringens epsilon toxin	INSA	Dr. Lalit Garg
6	IHRC	Immuno-epigenetics study of the humoral immune response in COVID-19 patients from india	SERB	Dr. Nimesh Gupta
7	IFSD	DST'S INSPIRE Faculty Award Programme	SERB	Dr. Sanchita Das
8	UPSP	Establishment of a road map of signaling and trafficking cascades in malaria parasite - R&D project I	DBT	Dr. Pushkar Sharma
9	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
10	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
11	DPHI	Clinical applications of retinal neural like cells (RNLCs) derived from blood of retinitis pigmentosa (RP) patients	DST	Dr. P.K Upadhyay
12	IFPS	DST'S INSPIRE Faculty Award Programme	DST	Dr. Priyanka Shukla
13	VEPS	A novel vaccine evaluation platform to support SARS-CoV-2 vaccine development in resource-limiting settings	BIRAC	Dr. Nimesh Gupta
14	NTDC	Nanoparticles mediated targeted delivery of drugs and cancer antigens for combination therapy in lung cancer treatment	DBT	Dr. Aditi Varshney
15	GECU	Using next generation genome editing tool CRISPR/Case9 in Caenorhabditis elegans to understand the molecular link of nutrient signaling and aging	DBT	Dr. Arnab Mukhopadhyay
16	CTLS	Systems biology approaches to understand the biology of human CD4+helper T cells with cytotoxic potential (CD4-CTLs) in viral infections	DBT	Dr. Veena S. Patil

17	RDCP	Investigating the role of DivIVA domain containing proteins in M. Tuberculosis	SERB	Dr. Vinay Kumar Nandicoori
18	EPCH	Role of probiotic and EPC in high fat diet alcoholic induced liver disease	DST	Dr. Nidhi Chaudhary
19	PESP	Pilot evaluation of efficacy and safety of photoreceptor progenitors in animal models of retinal injury	ERPL	Dr. P.K Upadhyay
20	IFCM	Investigating on the functional consequences of modulation of glycosylation using non-canonical hexosamine analogues	ICMR	Ms. Pratima Saini
21	SMSG	Structural and mecanistic studies of the galactofuran biosynthesis enzymes from mycobacterium tuberculosis	ICMR	Dr. Savita Yadav
22	IBDR	Imparting sheath blight disease tolerance in rice	DBT	Dr. Amulya Kumar Panda
23	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
24	TARE	Financial sancton under teachers associateship for research excellence	SERB	Dr. Sagar Sengupta
25	ICTP	Immunoengineering: Cell therapy platform	DBT	Dr. Prafullakumar B. Tailor
26	DFIP	Development of novel near infrared fluroscence imaging probes for detecting amyloid beta species in eyes of alzheimer's disease animal model	ICMR	Dr. Sarika Gupta
27	TGBM	Towards design and development of biosensors for detection for detection of gut bacteria and their metabolites	ICMR	Dr. Anil Kumar
28	EVRL	Elucidating vitamin B12-driven diet-gene interactions that regulated food choice and longevity	SERB	Dr. Arnab Mukhopadhyay
29	ACRP	Directorate of Rice Research of ICAR	ICAR	Dr. Anil Kumar Suri
30	TURM	Towards understanding the role of gut microbiota and their metabolites in the causation and treatment of colorectal cancer	SERB	Dr. Anil Kumar
31	CNGV	INCENTIVE: Indo-European consortium for next generation influenza vaccine innovation	DBT	Dr. Prafullakumar B. Tailor
32	FAHR	Integrative functional analysis of the human immune responses to ta flavivirus vaccine	DBT	Dr. Nimesh Gupta
33	UDPN	Mechanistic investigatins of UDP-N-acetyl-D-galactosaminepolypeptide N-acetyl-D-galactosaminyl tranesases (ppGalNAcT) involved in the biosynthesis of mucin type O-glycosylation	SERB	Dr. Srinivasagopalan Sampathkumar
34	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

35	NPDP	SERB' National Post Doctoral Fellowship scheme	SERB	Dr. Priya Rani
36	CDCS	Charting a dendritic cell signaling network modulating intestinal inflammation	DBT	Dr. Soumen Basak
37	DTGS	Towards differential diagnosis of Tuberculosis at extrapulmonary sites using blood based gene signatures	DBT	Dr. Rajesh S. Gokhale
38	JCSS	Financial sanction of the award J C Bose Fellowship to Dr. Sagar Sengupta	SERB	Dr. Sagar Sengupta
39	UDCG	Understanding the dynamic changes in gene expression pattern in neonatal sepsis	DBT	Dr. Prabhat Upadhyay
40	UIAD	Towards understanding the interaction between triphala and gut microbiota & its implication in alzheimer's disease	ICMR	Dr. Prabhat Upadhyay
41	DVTR	Development of dendritic cell vaccine for the treatment of recurrent/metastatic reproductive cancers	ICMR	Dr. Anil Kumar Suri
42	AVIR	Investigating the cell intrinsic role of Re1B in modulating anti-viral interferon response to chandipura virus	ICMR	Ms. Yashika Ratra
43	SMPT	Structural and functional biology of membrane proteins from mycobacterium tuberculosis: Implications in the design of new anti-TB agents (submitted under call for proposal"Membrane structural biology")	DBT	Dr. Bichitra kumar biswal
44	MRAH	Evaluation of the role and mechanisms of Rigampicin and its analogs in alleviating hyperglycemiarelated complications	DBT	Dr. Arnab Mukhopadhyay
45	MVSK	Molecular mechanisms mediated by vitamin D signaling on skeletal muscle function	DBT	Dr. Aneeshkumar Arimbasseri
46	MRNG	MicroRNA nanotherapeutics for glioblastoma	SERB	DR. SAGAR SENGUPTA
47	CSPR	Characterizing a kinase that interact with the insulin signaling pathway to regulate gremline development, stress response and aging	ICMR	Mr. Gautam Chandra Sarkar
48	DWTM	Determination of whether and how the tuover of mitochondrial RECQL4 is regulated by its acetylation and Deacetylation	ICMR	Mr. Aamir Khan
49	IMBT	Investigating the role of miRNA in BLM patient cells lacking functional Bloom Helicase, a tumor suppressor whose mutation leads to a wide spectrum of cancer	ICMR	Dr. Swati Priya
50	PIPS	Understanding host-pathogen interactions and immune responses during infection with pathogenic salmonella	INSA	Dr. Ayub Qadri
51	NRTC	Nano-immunotherapeutic Approach for Reprogramming of Tumor Cells to Induce Sustainable Anti-tomor Immune Response	RCB	Dr. Santiswarup Singha
52	DTCB	Establishment of Data and Impact Analysis Unit for projects in the area of Theoretical and Computational Biology	DBT	Dr. Debasisa Mohanty

53	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
54	BLMH	Understanding the mechanism by which BLM helicase regulates ATM mediated response to Ionizing Irradiation	BRNS	Dr. Sagar Sengupta
55	IFAP	DST'S INSPIRE Faculty Award Programme	SERB	Dr. Archana Pant
56	NTPR	Nanotechnology-based Immuno-therapeutic Platform for Reprogramming of Anti-tumor Immune Network	DBT	Dr. Santiswarup Singha
57	URTD	Understanding the role of PKM2 in transcriptional dysregulation during malignant transformation	DBT	Dr. Sanjeev Das
58	NSAP	Nano-scale Artificial Antigen Presenting Cells to Reprogram the Tumor Antiogenesis	SERB	Dr. Santiswarup Singha
59	URTR	Understanding the role of HDAC5 in transcriptional reprogramming during tumorigenesis	SERB	Dr. Sanjeev Das
60	MBNT	Microbiota based nutritional therapy: New arsenal to fight Toxoplasma gondii treatment associated obesity	SERB	Dr. Tanmay Majumdar
61	ESHP	Elucidating the structure-function of Helicobacter pylori N-carbamoylputrescine amidase and to design structure-based inhibitor	SERB	Dr. Apurba Kumar Sau
62	DMHR	Determine whether mitochondrial helicase RECQL4 affects SIRT3 activity by regulating OXPHOS Complex I stability and assembly	SERB	Dr. Sagar Sengupta
63	URLC	Understanding the Role of Liver-secreted Cysteine-Rich with EGF-like Domains 2 (CRELD) in Diabesity	SERB	Dr. Devram Sampat Ghorpade
64	NPSK	SERB' National Post Doctoral Fellowship scheme	SERB	Dr. Santosh Kumar
65	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
66	RMPD	Regulation of malaria parasite division by protein phosphorylation	SERB	Dr. Pushkar Sharma
67	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
68	IRMT	Investigate into the role of alternate respiratory electron carrier polyketide quinone in pathophysiology of Mycobacterium tuberculosis	SERB	Dr. Debasisa Mohanty