

### Ongoing Projects 2020 - 2021

Sr.No.	Sanction Order No.	Title	Project Leader	Sponsoring agency	Start Date	End Date
1	BT/PR17945/BIC/101/563/2016	Multimodal glioblastoma therapy by blood brain barrier traversing and glioma targeting anti-cancer peptide theranostic nanoparticles	Dr. Gopal Kundu	DBT	19.06.2017	18.06.2020
2	BT/HRD/35/01/04/2017	Development of a predictive algorithm for precision medicine in ovarian Cancer	Dr. Sharmila Bapat	DBT	07.07.2017	06.07.2020 extended upto 31.03.2022
3	BT/PR25883/GET/119/105/2017	Dissecting the individual roles of Clta and Cltb in early mammalian development through selective CRISPR - Cas9-based knockout and knockin models	Dr. Deepa Subramanyam	DBT	27.03.2018	26.03.2021
4	SB/S2/RJN-048/2017	Neurobiology of food choice driven by nutrient specific memories and diet.	Dr. Gaurav Das	SERB	13.02.2018	12.02.2023
5	IA/E/16/1/503020	Understanding the role of RNAi - mediated antiviral host defense against DNA Viruses.	Dr. Jyoti Singh	Wellcome	01.01.2018	31.12.2023
6	BT/PR13969/BCE/8/1142/2015	Study of biomethanation potential of landfill methanogens and their prospective role in global climate change, carbon sequestration and generation of bioenergy.	Dr. Om Prakash	DBT	19.01.2017	18.01.2020 extended upto 18.01.2021
7	BT/PR23620/MED/31/368/2017	Molecular analyses of extra-cellular vesicles isolated from bone marrow-derived mesenchymal stromal cells treated with specific signaling modifiers and assessment of their effects on the fate of hematopoietic stem cells	Dr. Lalita Limaye	DBT	26.03.2018	25.03.2021
8	BT/PR15450/COE/34/46/2016 (CORE GRANT)	Centre of Excellence in Biomolecular Structure and Function on Host-Pathogens Interactions.	Dr. Janesh Kumar	DBT	28.12.2016	27.12.2021
9	BT/ Pune - Biocluster /01/2015	Establishment of A Pune Biotech Cluster, "Model Organism to Human Disease.	Dr. Manoj Kumar Bhat	DBT	29.06.2018	28.06.2021
10	BT/PR/25395/NER/95/1177/2017	Assessment of antimicrobial and plant growth promoting potential of Indigenous Endophytic Bacterial Strains of Manipur.	Dr. Shekhar Mande	DBT	11.09.2018	10.09.2021

11	BT/PR15450/COE/34/46/2016 ( R & D PROJECT 1 )	Structural perspective of molecular interactions in pathogenicity: Role of regulatory proteins of HIV-1 and heat shock proteins of M. Tuberculosis	Dr. Shekhar Mande	DBT	28.12.2016	27.12.2021
12	BT/PR15450/COE/34/46/2016 ( R & D PROJECT 2 )	Centre of Excellence in Biomolecular -Cellular Stress Proteins in HIV Infection : Biochemical and functional characterization.	Dr. Debashis Mitra	DBT	28.12.2016	27.12.2021
13	BT/PR15450/COE/34/46/2016 ( R & D PROJECT 3 )	Centre of Excellence in Biomolecular -Structural & functional role of Nuclear Envelope in HIV infection.	Dr. Radha Chauhan	DBT	28.12.2016	27.12.2021
14	BT/PR26398/BRB/10/1637/2017	Establishing the Structural and functional role of Nup155 and Nup35 in Nup93 subcomplex of the nuclear pore Complex.	Dr. Radha Chauhan	DBT	11.10.2018	10.10.2021
15	35/14/31/2017 - BRNS /35127 DAE	Therapeutic implication in radio resistance mechanism of breast cancer stem cells (BCSC).	Dr. Sandhya Sitaswad	DAE	08.01.2018	07.01.2021
16	BT/PR25181/NER/95/1061/2017	Quest for Cancer Drugs: Screening and Bioassay guided phytochemical Investigation of selected Endemic medicinal plants of Eastern Himalaya.	Dr. Manas Santra	DBT	18.09.2018	17.09.2021
17	BT/PR25858/GET/119/169/2017	Development of a stable and inducible CRISPR-Cas9 system for high throughput site specific genome editing in plasmodium falciparum	Dr. Vasudevan Seshadri	DBT	03.10.2018	02.10.2021
18	BT/Coord.II/01/03/2016	Establishment of Center of Excellence for "National Center for Microbial Resorce (NCMR)"	Dr. Yogesh Shouche	DBT	30.03.2017	29.03.2020 extended upto 30.09.2021
19	BT/PR10855/BRB/10/1330/2014	Acquisition of Modern Orbitrap mass spectrometer for establishing state of the art proteomics facility at National Centre for Cell Science.	Dr. Srikanth Rapole	DBT	12.07.2016	11.07.2021
20	EMR/2017/004441	Regulation of development of pathogenic T - helper 17 cells in collagen induced arthritis	Dr. Mohan Wani	DST	25.10.2018	28.09.2021
21	BT/HRD/35/01/04/2018	To evaluate the translational potential of IL - 3 for the treatment of osteoporosis and osteoarthritis	Dr. Mohan Wani	DBT	29.06.2018	28.06.2021
22	IA/E/14/1/501780	Decoding organism related evolution of surviving, a hub protein.	Dr. Zahid Kamal	Wellcome	01.07.2015	30.06.2020 extended upto 31.12.2021
23	EMR/2017/003331	Synthesis and development of novel HSP90 inhibitors as potential anti - HIV candidate molecules and elucidation of their mechanism of inhibition	Dr. Debashis Mitra	DST	03.10.2018	02.10.2021

24	EMR/2016/006589	Study of simultaneous denitrification and methane metabolism by denitrifying methanotrophs from Landfill Sites	Dr. Om Prakash	DST	06.11.2018	07.11.2021
25	BT/PR27731/BID/7/828/2018	MANAV Human Atlas Initiative	Dr. M.V.K.Sastry	DBT	27.02.2019	26.02.2022
26	BT/PR25893/GET/119/174/2017	Generation of knockout and Gal4 collection using CRISPR and recombineering for studying the in vivo function and DnaJ domain containing protein in Drosophila Melanogaster.	Dr. Amitabha Majumdar	DBT	05.03.2019	04.03.2022
27	BT/PR27451/BRB/10/1655/2018	Characterization of acute necrotizing encephalopathy-1(AEN-1) associated mutations in Nup358.	Dr. Jomon Joseph	DBT	07.03.2019	06.03.2022
28	BT/PR28506/MED/29/1307/2018	Role of complement anaphylatoxins C3a,C4a and C5a generated intracellularly in the infection locale in providing protection against viral infection.	Dr. Arvind Sahu	DBT	12.03.2019	11.03.2022
29	BT/PR29526/FCB/125/16/2018	Diversity & Bioactivity of Fungi from Achankmar-Amarkantak Biosphere Reserve with Emphasis on Conservation	Dr. Rohit Sharma	DBT	28.02.2019	27.02.2022
30	BT/PR28794/GET/119/274/2018	Deciphering Osteopontin Driven Regulator(s) of metastasis in Triple Negative breast Cancer using dead Cas-9 based tools. (Transferred to KIIT University)	Dr. Gopal Kundu	DBT	07.02.2019	06.02.2022
31	GBPNI/NMHS-2018-19	Development of microbial inoculants to improve growth & productivity of Darjeeling and Assam Tea	Dr. Praveen Rahi	GBPNI-NMHS	21.01.2019	20.01.2022
32	NCPOR/2019/PACER-POPS/BS-01	Understanding the network of active metabolic pathways functioning in indegeous microbial community: essential for maintaining major biogeochemical cycles and their survival/nutrient acquisition in oligotrophic glacier ecosystem.	Dr. Dhiraj Paul	NCPOR	05.07.2019	04.07.2022
33	BT/PR30450/MED/31/399/2018	Role of actin remodelling and membrane fluctuations in regulation of embryonic stem cell pluripotency	Dr. Deepa Subramanyam	DBT	05.07.2019	04.07.2022
34	BT/PR25368/NER/95/1161/2017	Diversity and bioactivity of fungal endophytes from medicinal plants Of Eastern Himalayan region, Sikkim-India.	Dr. Rohit Sharma	DBT	23.01.2019	22.01.2022
35	BT/PR31340/BCE/8/1505/2019	Impact of mass bathing on the natural microbiota of the river Ganges; a concern to human health	Dr. Yogesh Shouche	DBT	26.09.2019	25.09.2022

36	DST/SJF/LSA-01/2017-18	Effect of neuro-immune communication in the gut inflammation and auto-immunity	Dr. Girdhari Lal	DST	01.07.2019	24.06.2024
37	CRG/2018/002298	A CRISPR-based gene therapy approach for targeting the breast cancer stem cells in vivo	Dr. Gopal Kundu & Dr. Srikanth Rapole	SERB	18.10.2019	17.10.2022
38	BT/PR23968/BRB/10/1602/2017	Human Microbiome Initiative of select Endogamous Population of India	Dr. Yogesh Shouche	DBT	09.03.2020	08.03.2022
39	SRG/2019/001818	Anaerobic ammonia oxidising bacteria (Anammox) as potential source for treating ammonia rich waste: Diversity and technology	Dr. Tushar Lodha	SERB	06.11.2019	05.11.2021
40	18017/187/CSS/R&D/KR-03/2019-20-NMPB-IV-A	Determination of the vector of sandal spike disease (SSD) of Indian Sandalwood (Santalum Album L.) and Development of integrated vector management strategies.	Dr. Amit Yadav	Ministry of Ayush	05.02.2020	04.02.2023
41	MoES/P.O.(Seismo)/ 1(361)/2019	Study on distribution, function, and genomic reconstruction of deep-subsurface abundant and rare microbial communities in different depth of the rock ( Basalt - granite Zone) at Koyan -Waran region	Dr. Dhiraj Paul Dr. Yogesh Shouche	Ministry of Earth Science	05.02.2020	04.02.2022
42	BT/NBM0166/04/19	Establishment of GMP-Compliant National Repository for banking, safe deposit and supply of characterized mammalian cells for us in biopharma	Dr. Punam Nagvenkar	BIRAC	01.10.2019	31.09.2023
43	CRG/2019/004981	Elucidating the role for Toll-like receptor 9 mediated extracellular vesicle release from B cells	Dr. Akanksha Chaturvedi	SERB	26.03.2020	25.11.2022
44	CRG/2019/001157	Proteogenomics based identification and Characterization of a novel ITGB8 isoform in ovarian cancer and elucidation of its functional relevance.	Dr. Sharmila Bapat	SERB	27.03.2020	26.03.2023
45	5/258/98/2020-NMITLI	Generation of neutralizing human monoclonal antibodies against the SARS - CoV2 virus as therapeutic strategy to contain the COVID - 19 Pandemic	Dr. Arvind Sahu	CSIR	29.05.2020	28.05.2021 extended upto 30.11.2021
46	CRG/2019/005587	The neurophysiological pathways of emesis in Drosophila melanogaster	Dr. Gaurav Das	SERB	12.06.2020	11.06.2023
47	BT/PR32331/BRB/10/1774/2019	Characterization of inter-cellular transport of Ran GTPase	Dr. Jomon Joseph	DBT	27.08.2020	26.08.2023

48	CRG/2019/004159	Deciphering the role of long noncoding RNAs (lncRNAs) in mediating replication stress response during cell division	Dr. Vidisha Tripathi	SERB	21.02.2020	20.02.2023
49	BT/COVID0032/01/20	Production of pseudotyped SARS-CoV-2 in BSL-2 setting using vesicular stomatitis virus VSV platform for candidate vaccine development and biomedical research use	Dr. Akanksha Chaturvedi	BIRAC	06.06.2020	05.06.2021
50	CVD/2020/000298	Development of Nanobodies as prophylactic and therapeutic candidates against SARS-CoV-2 virus.	Dr. Janesh Kumar	SERB	26.10.2020	25.10.2021
51	BT/PR31772/BRB/10/1767/2019	Comprehensive characterization of novel lncRNA-protein network orchestrating the mammalian cell cycle program	Dr. Vidisha Tripathi	DBT	03.12.2020	02.12.2023
52	CRG/2020/003971	Structural investigations of GluK2 and GluK3 kainate receptors in lipidic environment	Dr. Janesh Kumar	SERB	17.03.2021	16.03.2024
53	CRG/2020/005433	To understand the immunosuppressive activity of secretory PD-L1 and its regulation by F-Box proteins to develop potent immunotherapeutic leads for cancer	Dr. Manas Santra	SERB	14.01.2021	13.01.2024
54	2020-3076/SCR/ADHOC-BMS	Understanding the role of clathrin mediated endocytosis in neural development and function	Dr. Deepa Subramanyam	ICMR	15.02.2021	14.02.2024
55	AMR/Adhoc/236/2020-ECD-II	Genomic based approaches for characterization of the microbial antibiotic resistance and resistome in dairy production system	Dr. Yogesh Shouche CO-PI: Dr. Ajay Pillai	ICMR	25.03.2021	24.03.2022
56	RAD-22017/28/2020-KGD-DBT-Pt. (1)	Genomic surveillance for SARS-CoV-2 in India: Indian SARS-CoV-2 Genomics Consortium (INSACOG)	Dr. Yogesh Shouche CO-PI: Dr. Ajay Pillai	DBT	26.03.2021	25.07.2021 extended upto 25.10.2021
57	82(431)/2020-PMF	DBT-NCCS CDL Vaccine Testing Facility	Dr. Punam Nagvenkar & Dr. Yogesh Shouche	DBT	13.01.2021	12.01.2022

### Completed Projects 2020 - 2021

Sr.No.	Sanction Order No.	Title	Project Leader	Sponsoring agency	Start Date	End Date
1	IA/I/12/1/500507	The role of endocytosis in regulation of stem cell functions and cell fate decisions during early development.	Dr. Deepa Subramanyam	Wellcome	01.05.2013	30.04.2018 extended upto 31.10.2020
2	BT/PR11928MED/31/275/2014	Identification of aging-induced epigenetic changes causing hematopoietic stem cell dysfunction: Rescue using in vitro niche (IVN)- technology.	Dr. VP Kale	DBT	09.02.2017	08.02.2020 extended upto 08.05.2020
3	'YS-BT-PR20390-DR. SHOUCHE'!A1	Development of efficient and low cost biotechnology for colour removal of biometanated spentwash from distillery.	Dr. Yogesh Shouche	DBT	22.06.2017	21.06.2020
4	NCCS/GL/KEMHRC-II/2019-20/1	To Evaluate the effect of Yakult on the immune system of late middle-aged Indian adults	Dr. Girdhari Lal	KEMHRC-NCCS	27.04.2019	26.04.2020
5	BT-PR-14156-BRB/10/1515/2016	Antigen specific regulatory CD8 T cell vaccination to control food allergy and establishment of oral tolerance .	Dr. Girdhari Lal	DBT	25.07.2017	24.07.2020
6	BT/IN/NFECT/ERA/33/BS/2016-17	INLEISH: Immunometabolic Networks in the Regulation of Visceral Leishmaniasis	Dr. Bhaskar Saha	DBT	26.05.2017	25.05.2020
7	DST-VI-D&P/551/2016-17/TDT(G)	Developing bank of human induced pluripotent stem cell for drug screening. Disease modelling and understanding disease biology	Dr. Anjali Shiras	DST	26.05.2017	25.05.2020
8	ECR/2016/000429	Studying the translational homeostasis landscape in Drosophila Fragile-X syndrome model.	Dr. Amitabha Majumdar	DST	20.02.2017	19.02.2020 extended upto 14.12.2020
9	DST/INT/UK/P-123/2016	Mode of CD40 Clustering dictates its functional duality	Dr. Bhaskar Saha	DST	23.06.2017	22.06.2020
10	BT/PR11939	CD 40 Clustering on membrane and perturbation by Leishmania	Dr. Bhaskar Saha	DST	12.12.2017	11.12.2020
11	ACCTS/MW/SPPU/AYUSH	Preclinical on development of therapeutic adjuvants based on Ayurveda.	Dr. Mohan Wani	AYUSH	31.08.2017	30.08.2020
12	BT/AMR0308/05/2018	Understanding the transmission of antibiotic resistance between hospitals and environment	Dr. Yogesh Shouche	BIRAC	25.01.2019	24.07.2020 extended upto 06.03.2021
13	BT/CRS0400/PACE-14/18	Scaling up of proprietary lab scale Fenugreekseed extract production for management of obesity.	Dr. Manoj Kumar Bhat	BIRAC	22.03.2019	19.09.2020 extended upto 21.03.2021
14	BT/PR15178/MED/31/313/2015	Investigating the role of RNA binding proteins in pluripotency and differentiation of induced pluripotent stem cell	Dr. Vasudevan Seshadri	DBT	21.06.2017	20.06.2020 extended upto 31.03.2021