

Sponsored Projects: Center for Emerging Diseases

1. Building integrated pipeline for cancer genome analysis: Role of mobile genetic elements in cancers, Department of Biotechnology (DBT), Govt. of India, Duration: **2017-2020**, Grant value: **29.38 Lakh**, **PI: Dr Kamal Rawal, Co-PI: Dr. Sanjay Gupta.**
2. Investigating microRNAs as the Next Generation Therapeutic Targets in Diabetic Cardiomyopathy, Science and Engineering Research Board (SERB) -DST, Govt. of India, Duration: **2018-2020**, Grant value: **40 Lakh**, **PI: Dr Vibha Rani.**
3. Identification of cellular targets of Chikungunya virus non structural proteins, Indian Council of Medical Research (ICMR), Duration: **2016-2019**, Grant value: **34.1 Lakh**, **PI: Dr. Sanjay Gupta, Co-PI: Dr. Reema Gabrani.**
4. Nanoparticles based amperometric biosensor for detection of thyroid dysfunctioning, Department of Science and Technology (DST), Govt. of India, Duration: **2014-2016**, Grant value: **37.3 Lakh**, **PI: Dr. Sudha Srivastava, Co-PI: Dr. Vibha Gupta.**
5. Development for reagents for simple immunochemical tests for the detection of Chikungunya infection, Department of Biotechnology (DBT), Govt. of India, Collaborative project among UDSC, IIIT and ICMR Virus Unit Kolkatta. IIIT, Duration: **2014-2017**, Grant value: **18 Lakh**, **PI: Dr. Sanjay Gupta.**
6. Purification of Chikungunya virus nsP3 Protein for peptide based inhibitor and structural studies, Department of Biotechnology (DBT), Govt. of India, Duration: **2013-2016**, Grant value: **68.6 Lakh**, **PI: Dr. Sanjay Gupta, Co-PI: Dr. Sanjeev K. Sharma/ Dr. Vibha Gupta/ Dr. Vijay K. Chaudhary.**
7. Structural Biology of CysE from pathogenic organisms – Potential for rational drug design, Department of Biotechnology (DBT), Govt. of India, Duration: **2013-2017**, Grant value: **42.9 Lakh**, **PI: Dr. Vibha Gupta Co-PI: Dr. Punit Kaur (AIIMS).**
8. Development of inhibitors to target glyoxylate and methylcitrate cycles essential for persistence of Mycobacterium tuberculosis. Indian Council of Medical Research (ICMR), IIIT, Duration: **2015-2018**, Grant value: **~33.7 Lakh**, **PI: Dr. Vibha Gupta.**
9. Studies on the phylogenomics and population genomics of Indian Drosophila, Department of Science and Technology (DST), Govt. of India, Duration: **2014-2017**, Grant value: **34.10 Lakh**, **PI: Dr. Sujata Mohanty.**
10. Effect of curcumin on cardiac hypertrophy, Department of Biotechnology (DBT), Govt. of India, Duration: **2012-2016**, Grant value: **33.26 Lakh**, **PI: Dr. Vibha Rani.**
11. Stage specific microRNA profiling from developing chick heart, Department of Biotechnology (DBT), Govt. of India, Duration: **2012-2016**, Grant value: **43.11 Lakh**, **PI: Dr. Vibha Rani.**

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12. Development and evaluation of green tea catechins based intravaginal nanoemulsion gel for the treatment of urinary tract infections, Department of Biotechnology (DBT), Govt. of India, Duration: **2013-2016**, Grant value: **23.53 Lakh**, **PI: Dr. Shweta Dang**, **Co-PI: Dr. Reema Gabrani/ Dr. Javed Ali** (Jamia Hamdard, New Delhi).
13. Viral-viral and viral-host protein interactions in chandipura virus mediated encephalitis, Department of Science and Technology (DST), Govt. of India, Duration: **2010-2013**, Grant value: **35.57 Lakh**, **PI: Dr. Sanjay Gupta**, **Co-PI: Dr. Reema Gabrani/Dr. Amita Gupta** (Delhi University).
14. Mapping viral host protein interactions of Chikungunya virus, All India Council for Technical Education, under “Research Promotion Scheme”, Duration: **2009-2012**, Grant value: **15.45 Lakh**, **PI: Dr. Sanjay Gupta / Dr. Sanjeev K. Sharma**.
15. Mapping of interactions among Chikungunya virus proteins, Department of Biotechnology (DBT), Govt. of India, Duration: **2008-2012**, Grant value: **24.87 Lakh**, **PI: Dr. Sanjay Gupta**, **Co-PI: Dr. Reema Gabrani /Dr. Vijay K. Chaudhary** (Delhi University).
16. Up gradation of comparative and functional genomics lab, All India Council for Technical Education, under “scheme for modernization and removal of obsolescence in technical education”, Duration: **2008-2009**, Grant value: **7 Lakh**, **PI: Dr. Sanjeev K. Sharma**, **Co-PI: Dr. Sanjay Gupta**.
17. Inferring the origin, population structure and demographic history of *Drosophila malerkotliana* with population genomic approach, Department of Science and Technology (DST), Govt. of India, Duration: **2007-2010**, Grant value: **7.44 Lakh**, **PI: Dr. Sujata Mohanty**.
18. Designing a nanoparticles based glucose biosensors, All India Council for Technical Education (AICTE), under “Research Promotion Scheme”, Duration: **2009-2012**, Grant value: **8.4 Lakh**, **PI: Dr. Sudha Srivastava**, **Co-PI: Dr. Nidhi Gupta**.
19. Cardio protective properties of curcumin: Molecular interaction of cardiac transcription factors, Department of Science and Technology (DST), Govt. of India, Duration: **2009-2012**, Grant value: **19.99 Lakh**, **PI: Dr. Vibha Rani**.
20. Nanoparticle based Drug delivery system of some antiepileptic drugs for brain drug delivery through nasal route, Department of Biotechnology (DBT), Govt. of India, Duration: **2011-2014**, Grant value: **25.175 Lakh**, **PI: Dr. Shweta Dang**, **Co-PI: Ms. Manisha Singh/Dr. Javed Ali** (Hamdard University).
21. Differential expression pattern of miRNAs in rice root during Cr(VI) stress (**Young Scientist: Dr Sonali Dubey**) Department of Science and Technology (DST), Govt. of India, Duration: **2015-18**, Grant value: **32.60 Lakh**, **Faculty Mentor: Dr. Vibha Rani**.

Sponsored Projects: Plant & Microbial Biotechnology Group

1. Potentially novel carbohydrases (cellulase and related enzymes) for waste management from cultivable bacteria and functional metagenomic library of North East India biodiversity hotspot, Department of Biotechnology (DBT), Govt. of India, Duration: **2017-2020**, Grant value: **22.21 Lakh**, **PI: Dr. Indira P. Sarethy, Dr. Hariprasanna Deka Boruah**, Senior Scientist, CSIR-North East Institute of Science And Technology; **Co-PI: Prof. Sanjay Gupta**
2. Evaluation of the heavy metals content in market samples of plant raw drugs used in Ayurveda. (AYUSH), Govt. of India, Duration: **2018-2021**, Grant value: **41.1 Lakh**, **PI: Dr. Pammi Gauba**.
3. Application of customized PGPM based formulations for reclamation of soil permeated with Organophosphate , Department of Biotechnology (DBT), Govt. of India, Duration: **2017-2020**, Grant value: **62.1 Lakh**, **PI: Dr. Krishna Sundari, Co-PI: Dr Sudha Srivastava**.
4. Development of a biocatalyst for the removal of nitrogen and sulphur from diesel, Department of Science and Technology (DST), Govt. of India, Duration: **2014-2017**, Grant value: **24.9 Lakh**, **PI: Dr. Nidhi Gupta**.
5. Ability of select PGPM strains to remediate organophosphate pesticides commonly used in agriculture, Department of Biotechnology (DBT), Govt. of India, Duration: **2013-2015**, Grant value: **6.59 Lakh**, **PI: Dr. Krishna Sundari, Dr. Nandini K. E**, Postdoctoral research associateship.
6. Development of a biocatalyst for dearomatization of diesel, Department of Biotechnology (DBT), Govt. of India, Duration: **2013-2015**, Grant value: **6.92 Lakh**, **PI: Dr. Nidhi Gupta, Co-PI: Sanjay Gupta/Dr. D.K. Adhikari** (Indian Institute of Petroleum, Dehradun).
7. Screening of native microbes with tannase producing ability, production of tannase and gallic acid using alternate substrate, Department of Biotechnology (DBT), Govt. of India, Duration: **2012-2014**, Grant value: **19.44 Lakh**, **PI: Dr. Krishna Sundari**.
8. Scientific documentation and digitization for selected Indian medicinal plants for antidiabetic and other activities, Dept. of AYUSH, Govt. of India, Duration: **2009-2011**, Grant value: **7.0 Lakh**, **PI: Dr. Rachana**.
9. Formulation of microbial consortia with parallel biofertilizer and biocontrol properties, Department of Biotechnology (DBT), Govt. of India, Duration: **2010-2014**, Grant value: **57.39 Lakh**, (JIIT: **24.22**; TERI: **33.17**), **PI: Dr. Krishna Sundari, Co-PI: Dr. Reena Singh** (The Energy and Resources Institute).
10. Studies on production of therapeutically important saponins using *in-vitro* culture of *Bacopa monnieri*. Department of Science and Technology (DST), Govt. of India, Duration: **2014-2017**, Grant value: **16.60 Lakh**, **PI: Pragya Bhardwaj** (womenscientist-DST-WoS-A, Faculty mentors: **Dr. Ashwani Mathur/Dr. Chakresh K. Jain**.
11. Biotechnological solution for attaining longer shelf life and portability of microbial inoculum. Trident GreenTech Pvt. Ltd., Andhra Pradesh, Duration: **2015-2016**, Grant value: **19 Lakh** approx; **PI: Dr. S Krishna Sundari**