

Department of Biophysics

University of Delhi, South Campus, New Delhi-110021

The Department of Biophysics, established in 1985, as a part of Faculty of Applied & Interdisciplinary sciences (FIAS). It offers postgraduate M.Sc. and Ph.D. courses in Biophysics. The curriculum provides an in-depth understanding of both the theoretical and practical aspects of various traditional and contemporary fields of biophysics, with a strong focus on hands-on training.

The primary research and teaching theme of the department is: Unraveling the complex mechanisms of biological systems through the lens of physics. The department significantly contributes to the development of innovative biophysical techniques, creation of computational models for biological systems, and exploration of novel therapeutic strategies to address a range of human diseases.

FACULTIES



Prof. Subhendu Ghosh Designation: Professor (Superannuated)











Dr. Hemlata AgnihotriDr. Suman TapryalDesignation: Assistant ProfessorDesignation: Associate Professor

Prof. Manisha Goel sor **Designation**: Head of the Department & Professor Prof. Manish Kumar Designation: Professor Dr. Sumit Kumar Chaturvedi Designation: Assistant Professor

Major Ongoing Projects

| S. No. | Project Title | Name of PI | Funding Agency |
|--------|--|--|--|
| 1 | Using the National COVID-19 testing database to develop a machine learning model for rapid prioritization/triage of SARS-CoV2 patients and demographic groups | Dr. Manish Kumar | ICMR, Department of Health & Family Welfare, Govt. of India, New Delhi New Delhi |
| 2 | Artificial intelligence-aided genomics, trancriptomics and proteomics analyses of multidrug-resistant enteropathogens to discern novel drug targets | | ICMR, Department of Health & Family Welfare, Govt. of India, New Delhi New Delhi |
| 3 | Center of Antibody Engineering: Center for Immuno-Diagnostics! Therapeutics Veneering technologies (CIVET) | Prof. Manisha Goel & Dr. Manish Kumar | SERB - DST, Govt. of India, New Delhi |
| 4 | Specific single domain antibodies (sdAbs) against antimicrobial resistant Mastitis pathogens for clinical therapeutic use in dairy animals | | DBT, Govt. of India, New Delhi |
| 5 | Investigations into the adjuvant-like role of IgM Fc domains, as fusion partner of chimeric HSV2- Fc subunit vaccines, in stimulating Th1 type immune response in mice | Dr. Suman Tapryal | ICMR – (Extramural Grant) |
| 6 | Therapeutic Approach for Parkinson's disease | Dr. Sumit Kumar Chaturvedi | ICMR |
| 7 | In silico and molecular investigation of super-conserved receptor expressed in the brain, SREB3 (GPR173): A putative therapeutic target for brain disorders | Dr. Hemlata Agnihotri | IOE |
| 8 | Elucidating the functional insights of super-conserved receptor expressed in the brain, SREB3 (GPR173). | | SERB-SRG |