

Details of Faculty at ACBR with number of vacant seats and their respective area of research

S. No	Name of Faculty	No. of Vacant Seats	Area of Research in which seats are available
1	Prof. K. Natarajan	01	Immunology of Infectious Diseases with emphasis on mycobacteria
2	Prof. Pratibha Mehta Luthra	04	Research in my laboratory focuses on i) the study of oxidative stress mediated signaling pathways leading to neurodegeneration ii) study the molecular mechanism of neuro-regeneration using primary neuronal cells isolated from rat brain, iii) Study the effect of new chemical entities (NCE) in the therapy of Parkinson's disease (PD) mediated through adenosine A2ARs using primary cell lines and in vivo rat model of PD iii) The work also involves to explore the molecular pathways in the pathology of GBM, which may reveal multiple targets for the treatment of GBM to address drug resistance and provide specificity and selectivity in cancer chemotherapy.
3	Prof. Madhu Chopra	04	"Design and development of target specific therapeutics against human diseases such as cancer and infection. Project would involve use of computer aided drug design specifically machine learning and Artificial Intelligence based design of drugs, drug repurposing, bioevaluation using in vitro and in vivo methods. The project will also involve preclinical evaluation of repurposed drugs in animal models."
4	Prof. Manisha Tiwari	02	pharmaceutical chemistry/biological chemistry and biochemistry
5	Dr. Manisha Yadav	03	Medical Microbiology and Immunology
6	Dr. Ajay Kumar Yadav	02	Molecular Oncology, Cancer therapeutics
7	Dr. Aparna Dixit	01	Understanding the molecular mechanisms of drug resistance and epileptogenesis in drug resistant epilepsy pathologies in both patient samples and animal model of epilepsy.
8	Dr. Meenakshi Sharma	01	Modulating Aging in Caenorhabditis elegans

9	Dr. Sanjay Kumar Dey	01	<p>“Discovery of small-molecule inhibitors of SARS-CoV-2 structural proteins using structure-based approach”</p> <p>Brief Details: (1) Expression and purification of recombinant yet stable SARS-CoV-2 structural proteins (i.e. spike, membrane, envelope, and nucleocapsid); (2) Structure-based discovery (using Biophysics and Bioinformatics), validation (using Biochemistry) and deciphering the mechanism of actions of inhibitors of SARS-CoV-2 structural proteins with the help of X-ray crystallography and/or single particle cryo-EM facilitated by nano-disc technology; (3) Binding studies (using CD, fluorescence, FTIR spectroscopies and ITC, SPR etc.) of SARS-CoV-2 structural proteins in presence of these inhibitors; (4) Other techniques/approaches, if necessary.</p>
10	Dr. Urmi Bajpai	03	<p>Anti-Mycobacterial drug discovery -</p> <ol style="list-style-type: none"> 1. Multi-target inhibition of Mur enzymes in Mycobacterium tuberculosis: screening of inhibitors and drug repurposing; 2. Exploring anti-mycobacterial potential of bacteriophages and their derived lysin enzymes
11	Dr. Varsha Mehra	01	Protein Characterisation and Purification