

## Priority research domains for aspirants to join NIAB under PhD program

| Scientist            | Thematic area for the prospective PhD student  |
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| Dr G Taru Sharma     | 1. Stem Cell Therapeutics  |
| Dr Sandeep Goel      | 1. Stem cell biology<br>2. Organoid biology  |
| Dr HBD Prasad        | 1. DNA damage and repair<br>2. Aging   |
| Dr Bappaditya Dey    | 1. Molecular immunology<br>2. Vaccine development<br>3. Pathobiology of Tuberculosis & other Mycobacterial diseases  |
| Dr Pankaj Suman      | 1. Systems biology and Omics approaches in reproductive medicine<br>2. Early stage biomarker and biosensor for precision livestock farming   |
| Dr Sonu Gandhi       | 1. Biosensor Development-Electrochemical, Optical, Microfluidics, Lab-on-a-chip<br>2. Nanomaterials based scaffolds for therapeutic applications<br>3. Best from Laboratory Waste-for diagnostic potential                                   |
| Dr Shailesh Sharma   | 1. IncRNA identification playing role in different physiological conditions<br>2. Protein Structure calculation<br>3. Molecular dynamics simulations, Docking and Screening calculations   |
| Dr Madhuri Subbiah   | 1. Molecular Virology<br>2. Host-pathogen interaction<br>3. Understanding the molecular pathogenesis of viral disease  |
| Dr. Nirmalya Ganguli | 1. Generation of transgenic animal bioreactor for production of therapeutic protein.<br>2. Germ cell/ Stem cell transplantation for generation of sperm with elite trait.<br>3. Genome engineering to increase productivity in farm animals. |

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| <b>Dr Abhijit Deshmukh</b> | <ol style="list-style-type: none"><li>1. Molecular Parasitology</li><li>2. Gene regulation</li><li>3. Cell cycle</li></ol>  |
| <b>Dr Paresh Sharma</b>    | <ol style="list-style-type: none"><li>1. Discovering new drug and vaccine targets for controlling lymphoproliferative disease caused by apicomplexan parasite Theileria</li></ol> |
| <b>Dr Santosh Dasari</b>   | <ol style="list-style-type: none"><li>1. Endometrial Receptivity</li><li>2. Endometritis</li><li>3. Novel Therapeutics</li></ol>  |
| <b>Dr Yash Pal</b>         | <ol style="list-style-type: none"><li>1. Nutrigenomics</li><li>2. Rumen microbiome</li><li>3. Animal nutrition</li></ol>  |