

**Annexure I: Externally funded Research Projects submitted by PIs for approval of IBSC**

| Sl No. | Department   | Title of Research Project   | Name of the PI with designation                       | Funding Agency | Proposed Category of Experiment | Verified Category of Experiment | BSL level required | Remarks   |
|--------|--------------|---|---|----------------|---------------------------------|---------------------------------|--------------------|---|
| 1.     | Microbiology | Development of DIVA diagnostics and marker vaccine against duck plague virus  | Dr. (Mrs.) Sutopa Das<br>Professor                    | DBT            | II                              | II                              | 2                  | Approved  |
| 2.     | AGB          | Molecular characterization of fecundity genes in Assam Hill goat  | Dr. Farzin Akhtar<br>Junior Scientist                 | DBT            |                                 | Not required                    |                    | Approval is not required  |
| 3.     | AGB          | Isolation characterization and development of a culture method for long-term preservation of spermatogonial stem cells from Doom Pig                          | Dr (Mrs.) Arpana Das<br>Professor                     | DBT            |                                 | Not required                    |                    | Approval is not required  |
| 4.     | Microbiology | Sero-surveillance of Leptospira infections in animals of North eastern region of India  | Dr. Durlav P. Bora<br>Assistant Professor             | DBT            | II                              | II                              | 2                  | Approved  |
| 5.     | Microbiology | Development and evaluation of DIVA-based vaccine utilizing an Indian isolate of classical swine fever virus   | Dr. N.N. Barman<br>Professor                          | DBT            | II                              | III                             | 3                  | Approved subject to the condition that the work will be limited to trial of purified recombinant protein vaccine and no handling of live mutant virus will be done. |
| 6.     | Microbiology | An integrated omics approach to characterize circulating Newcastle disease virus and intervention strategies to control Newcastle disease in North East India | Dr. Pankaj Deka<br>Assistant Professor                | DBT            | II                              | III                             | 3                  | Approved  |
| 7.     | Parasitology | Gastro-intestinal Parasitism  | Dr. (Mrs.) Kanta Bhattacharjee<br>Assistant Professor | ICAR           |                                 | Not defined                     | 2                  | Approved  |

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|-----|------------------------------------|---|--------------------------------------|-----|----|-------------|-----|---|
| 8.  | Parasitology                       | Molecular platform for epidemiology, disease mapping and development of diagnostics for economically important diseases of ducks  | Dr. (Mrs.) S. C. Phukan              | DBT |    | Not defined | 2   | Approved but BSL-2 has to be maintained                                   |
| 9.  | Epidemiology & Preventive Medicine | Epidemiological studies on emerging infectious diseases of Asian Elephants ( <i>Elephas maximus</i> ) with special reference to tuberculosis (TB) and elephant endotheliotropic herpes virus (EEHV) | Dr. G. Mahato<br>Professor           | DBT | II | III         | 2   | Approved  |
| 10. | Animal Biotechnology               | Analysis of Gut Metagenome of Duck ( <i>Anas platyrhynchos</i> ) with special reference to Identification of Bacteria having Probiotic Potential  | Dr. P Borah<br>Professor & Head      | DBT | I  | I           | 2   | Approved  |
| 11. | Microbiology                       | Establishment of Advanced Animal Disease Diagnosis and Management Consortium in the North East (ADMaC)  | Dr. S.K. Das<br>Professor & Head     | DBT | II | II/III      | 2/3 | Approved (BSL-3 facilities to be created as per the project)              |
| 12. | Microbiology                       | Prevalence and divers of selected zoonotic pathogens and use of antimicrobials in livestock farms in North-Eastern region: A mixed methods study  | Dr. S.K. Das<br>Professor & Head     | DBT | II | II/III      | 2/3 | Approved (BSL-3 facilities to be created under ADMaC project may be used) |
| 13. | Microbiology                       | Attempt to develop diagnostic and preventive measures for suspected fish viral diseases encountered in Assam  | Dr. S.K. Das<br>Professor & Head     | DBT | II | II          | 2   | Approved  |
| 14. | Microbiology                       | Genetic characterization of antibiotic resistant <i>Clostridium perfringens</i> and <i>Clostridium difficile</i> , and their public health significance   | Dr. R. K. Sharma<br>Professor & Head | DBT | II | II          | 2   | Approved  |

**Annexure II: Students' Research Proposals submitted for IBSC approval**

| Sl. No. | Name of the Student, Regn No. & Department   | Name of the Major Guide | Title of Research   | Degree Programme (MVSc/ PhD) | Proposed Category of Experiment | Verified Category of Experiment | BSL level required | Remarks                                 |
|---------|--|-------------------------|---|------------------------------|---------------------------------|---------------------------------|--------------------|---|
| 1.      | Dr. Sabentini S. Marak<br>2017-VMK-38<br>(Clinical medicine, Ethics & Jurisprudence) | Dr. B. Changkija        | Canine Pyoderma: Diagnosis and Therapeutic Management   | MVSc                         | II                              | II                              | 2                  | Approved                                |
| 2.      | Dr. Nanswita Borah<br>2017-VDK-21<br>(Parasitology)                                  | Dr. S.C. Phukan         | Epidemiology and molecular identification of trematode parasites of duck with special reference to echinostome                                | PhD                          |                                 | Not defined                     | 2                  | Approved but BSL-2 has to be maintained |
| 3.      | Dr. Shyama Prasad Panda<br>(Microbiology)  | Dr. D.P Bora            | Attenuation and molecular characterization of goatpox isolated from Assam   | MVSc                         | II                              | II                              | 2                  | Approved                                |
| 4.      | Dr. Jiaur Rahman<br>2017-VMK-21<br>(LPM)   | Dr. N.K. Sarma          | Physico-chemical & microbial quality of drinking water for livestock under organized & unorganized sectors in the Brahmaputra valley of Assam | MVSc                         | II                              | II                              | 2                  | Approved                                |
| 5.      | Dr. Leons Mathew Abraham<br>(Microbiology)   | Dr. Sophia M. Gogoi     | Characterization of Methicillin Resistant <i>Staphylococcus aureus</i> (MRSA) isolated from raw meat  | MVSc                         | II                              | II                              | 2                  | Approved                                |
| 6.      | Dr. Himangshu Baruah<br>(Pharmacology & Toxicology)                                  | Dr. Jadav Sarma         | Evaluation of Antiviral Activity of Certain Plant Based Nanoparticles   | PhD                          | II                              | III                             | 3                  | Approved                                |
| 7.      | Dr. Pubaleema Deka<br>(Epidemiology & Preventive Medicine)                           | Dr. Mrinal Kr. Nath     | Prevalence of Newcastle Disease Virus in backyard and commercial poultry in Assam   | MVSc                         | II                              | II                              | 3                  | Approved                                |
| 8.      | Dr. Munmi Saikia<br>2016-VDK-23<br>(Parasitology)                                    | Dr. Kanta Bhattacharjee | Digestive tract protozoan parasitism in domestic birds with special reference to <i>Trichomonas gallinae</i> in Assam                         | PhD                          | ?                               | II                              | 2                  | Approved                                |

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| 9.  | Dr. Nouluongunuo Soukhrie (Microbiology)                       | Dr. N.N. Barman | Immune response of pigs vaccinated with classical swine fever DIVA based vaccine and cell culture adapted lapinized vaccine                                 | MVSc | II     | III | 2/3 | Approved subject to the condition that the work will be limited to trial of purified recombinant protein vaccine and no handling of live mutant virus will be done. |
| 10. | Dr. Ray Kayaga (Microbiology)                                  | Dr. K Sharma    | Isolation of foot-and-mouth disease virus type 'O' of bovine and porcine origin in different cell lines and molecular characterization of the adapted virus | MVSc | II     | III | 2   | Approved  |
| 11. | Dr. Sangyarani Sethy (Microbiology)                            | Dr. Pankaj Deka | Molecular characterization of a thermostable Newcastle Disease virus isolate from Assam and it's immunogenic potential                                      | MVSc | II     | III | 2   | Approved  |
| 12. | Dr. Dibyajyoti Das (Clinical medicine, Ethics & Jurisprudence) | Dr. A. Phukan   | Prevalence of eye diseases in dog with special reference to bacterial infection   | MVSc | II     | II  | 2   | Approved  |
| 13. | Dr. Bandanpreet Kour Raisim 2017-VMK-47 (Parasitology)         | Dr. S. Islam    | Trematode parasites of Asian elephants ( <i>Elephas maximus</i> ) with special reference to liver fluke   | MVSc | ?      | II  | 2   | Approved  |
| 14. | Dr. Jameel Ahmad (LPT)   | Dr. M. Hazarika | Carcass and meat quality characteristics of Kamrupa chicken   | MVSc | II     | II  | 2   | Approved  |
| 15. | Dr. Sumi Roy (LPT)   | Dr. T Borpuzari | Effects of starter cultute and types of Bamboo Quality attributes of <i>Banhor Chunga Doi</i>   | MVSc | I & II | II  | 2   | Approved  |
| 16. | Dr. Nazneenara Fatem Iliash (LPT)                              | Dr. T Borpuzari | Protein fortification of Buffalo milk paneer  | MVSc | II     | II  | 2   | Approved  |
| 17. | Dr. Rimjhim Beypi (LPT)  | Dr. S.K. Laskar | Effect of oncorporation of inulin on the quality attributes of chhana patty   | MVSc | II     | II  | 2   | Approved  |

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|-----|---|-----------------|--|------|----|-----|---|----------|
| 18. | Dr. Salma Omar Ahmed (LPT)                            | Dr. Ankur Das   | To study the effect of <i>Dillenia indica</i> (elephant apple) or/and <i>Averrhoa carambola</i> (Star fruit) powder on quality attributes of chicken Patty         | MVSc | ?  | II  | 2 | Approved |
| 19. | Dr. Derhasar Brahma 2017-VDK-19 (Microbiology)        | Dr. K. Sharma   | Molecular detection and characterization of foot-and-mouth disease virus and study of cytokine expression in naturally infected local/cross-bred cattle from Assam | PhD  | II | III | 2 | Approved |
| 20. | Dr. Arfan Ali (Microbiology)                          | Dr. G.K. Saikia | Phenotypic & genotypic characterization of Methicillin Sensitive & Resistant <i>Staphylococcus aureus</i> (MSSA & MRSA) isolated from bovine mastitis              | PhD  | II | II  | 2 | Approved |
| 21. | Dr. Arpita Bharali 2017-VDK- (Animal Biotechnology)   | Dr. R.K. Sharma | Production & characterization of recombinant beta toxin of <i>Clostridium perfringens</i>  | PhD  | II | II  | 2 | Approved |
| 22. | Dr. Madhusmita Dutta 2017-VDK- (Animal Biotechnology) | Dr. P. Borah    | Molecular characterization and genotyping of Biofilm-producing <i>Staphylococci</i> associated with bovine mastitis  | PhD  | II | II  | 2 | Approved |
| 23. | Dr. Shakeel-ul Rehman (Animal Biotechnology)          | Dr. P. Borah    | DNA polymorphic mutations in mitochondrial genes encoding ND1, COI and CYTB in canine malignant tumours  | MVSc | -  | -   | 1 | Approved |