

30 Days Hands-on Training on

“Molecular diagnostic techniques for detection of infectious disease pathogens”

under the DHR-ICMR sponsored institutional support project titled “Capacity Building and Development of Skilled Human Resources in the field of Zoonotic Diseases under One Health Initiatives” with project ID 2024-1023

Organized by

Department of Animal Biotechnology, College of Veterinary Science, AAU, Khanapara, Guwahati-781022.

From: 8th August to 6th September, 2024

Zoonotic diseases illustrate some of the more interesting and complex patterns that have evolved in nature. It is well established that more than 60% of the known infectious diseases in human can be spread from animals, and 3 out of every 4 new or emerging infectious diseases in human come from animals (NCEZID, USA). The geographical location of the North-Eastern-Region of India sharing five international borders bears a constant threat to India’s livestock as well as human population of incursions of exotic as well as transboundary diseases through its porous border. This region is prone to various infectious diseases due to its climatic conditions, dense forests, and limited healthcare access in certain areas. Frequent exposure of the free ranging domesticated animal and bird populations to the wild-life population in the fringe regions further complicate the disease situations particularly the zoonotic diseases.

There is a lack of well-trained and skilled human resources in the field of infectious disease research and diagnosis particularly the zoonotic diseases in the North-Eastern region. College of Veterinary Science, AAU, Guwahati campus being a premiere institute with excellent teaching and research facility in the centre of the NE region can really play a pivotal role in the field of infectious disease research (zoonotic diseases) and generate well-trained and excellent human resources to fill the gap to some extent.

This training program will be organized with an aim to develop skilled human resources by giving hands on training to 25 selected teachers/ researchers/ biomedical workers / veterinary officers/ and veterinary/medical/biomedical research scholars on the molecular diagnostic techniques, molecular characterization and epidemiological investigations of the pathogens (particularly zoonotic pathogens).

The training will not only merely help to enhance knowledge and technical skills but also provide opportunities in future academic and research career in the field of infectious diseases.

Contents of the hands-on training: (Mostly practical and few theory classes)

Introduction to molecular diagnostics; Laboratory design and Good Laboratory Practices; Biosafety and biological waste management; Classification of different zoonotic diseases; Concepts on One Health; Microbiological specimen collection, preservation, transport and processing of samples for clinical diagnosis; Collection of blood and tissues for diagnosis of Tuberculosis, Anthrax and Brucellosis; Collection of samples for diagnosis of rabies; Polymerase Chain Reaction (PCR), Reverse Transcriptase PCR (RT-PCR) and Real-Time PCR for disease diagnosis; Primers and Probe designing by using Bioinformatics tools; Isothermal amplification reaction for disease diagnosis; Gene chip technology and high- throughput sequencing technology; Identification of bacteria by cultural, morphological and biochemical tests; Anti-microbial resistance and Antibiotic sensitivity test; Collection, fixation, processing and Staining of tissues for routine histopathological examination; Detection, isolation and identification of important pathogens of zoonotic importance from animal, human and environmental sources including foods of animal origin; Overview of emerging parasitic

diseases; Faecal examination technique for detection of helminth ova/egg and protozoan cyst/oocysts; Collection of blood samples, smear preparation and staining techniques for detection of haemoprotozoan parasites; Collection, preservation, Fixation, staining, mounting of helminths and arthropod for their identification.

Application procedure:

One can directly apply online by using the web link <http://vetbifg.ac.in/icmrhrd.php>

Download the application form from the link and upload the soft copy of the filled and signed application form through the mentioned link. For any other queries you can email to hod-abt.cvsc@aau.ac.in OR dipak.deka@aau.ac.in

No need to send hard copies of the applications. For any clarification, the interested applicants may contact Dr. Girin Hazarika (9954063163) or Dr. Chandra Bhattacharya (9435180061).

Application Fee:

Application process and the training is free of cost. A screening committee will finalized the list of selected applicants who will be allowed to register in the training program.

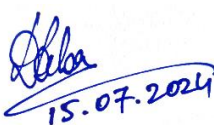
No TA/DA will be provided to the participants from the organizer to attend this training.

Lodging & Food:

Lodging for the selected candidates may be arranged in the College Guest house on twin sharing basis. The charges for accommodation must be paid directly in the Guesthouse at the time of check out (AC room @ Rs. 750/-day/person, Non-AC room @ Rs.400/-day/person). Only session tea will be served in the department for the participants during the training days. Breakfast, lunch and dinner will be available in the university guest house on payment basis.

Last Date of Application:

Last date of application is **1st August 2024**. List of the selected candidates will be posted in the website <http://www.vetbifg.ac.in/> on **3rd August 2024**. Also selected candidates will be intimated through email or over phone.



Head (i/c)
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A.A.U., Khanapara, Guwahati-22

Organizers:

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NOMINATION FORM FOR TRAINING

Training Code: [DHR-ICMR – 2024-25/01]

1. Name of the applicant:
2. Sex: Male/Female:
3. Age (in years):
4. Highest Qualifications & Discipline (Graduate/ PG/PhD):
5. Designation (current status):
6. Name of organization/department:
7. Category: Teacher/ Researcher/ Veterinary Or Medical Officer/ Post-graduate scholar etc.
8. Address for communication:
9. Telephone No.:
10. WhatsApp No.:
11. E-mail address:
12. Have you attended similar training earlier?
If yes, furnish details:
13. Details of working experience, if any:
14. Do you require accommodation? (Yes / No)

Signature of the applicant

Nomination:

I do hereby nominate _____ for participating in the training programme on “**Molecular diagnostic techniques for detection of infectious disease pathogens**” organized by the Department of Animal Biotechnology, College of Veterinary Science, A.A.U., Khanapara, Guwahati-781022 from 8th August to 6th September, 2024.

Office seal

Signature of the Nominating Authority

NB: Already passed out or independent candidate can avoid nomination part but need to fill the rest.