





Tamil Nadu Veterinary and Animal Science university
Translational Research Platform for Veterinary Biologicals

5 Days
Training
Programme

"CRISPR/Cas based molecular diagnostic platforms"

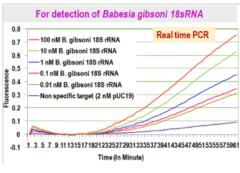
Training Fee
With GST = ₹ 7,080
(Includes manual, lunch and refreshments)

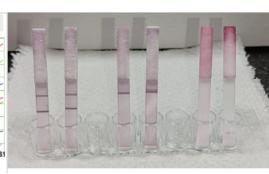
Last date for application submission : 31.05.2023

Publication of selection list : 07.06.2023

Last date for payment of training fee : 15.06.2023

Date of training : 03.07.2023 to 07.07.2023







ABOUT TANUVAS

Tamil Nadu Veterinary and Animal Sciences University (TANUVAS) is the first veterinary university in South East Asia to be established in 1989 at Chennai. Presently it has seven constituent veterinary colleges namely the Madras Veterinary College at Chennai (one of the oldest veterinary school in the country established in 1903), Veterinary College and Research Institutes (VCRI) at Namakkal, Tirunelveli, Orathanadu, Salem, Theni and Udumalpet. A College of Food and Dairy Technology at Koduvalli, Chennai; College of Poultry Production and Management, Hosur and a Post graduate Research Institute in Animal Sciences at Kattupakkam are also constituent units of the university. TANUVAS is an autonomous institution with a mandate to impart veterinary curriculum and undertake research that benefit stakeholders, farmers and rural people in co-operation with the Government departments. To disseminate the research findings and new technologies to the farming community, TANUVAS has several peripheral units in the form of 20 Veterinary University Training and Research Centres, 3 Farmers Training Centres (FTC), 4 Krishi Vigyan Kendras (KVK) and an Agricultural Technology Information Centre (ATIC). The University has one Poultry Disease Diagnosis and Surveillance Laboratory (PDDSL) at Namakkal, one Avian Disease Diagnostic Laboratory (ADDL) at Thalaivasal, one Veterinary University Training and Diagnostic Centre (VUTDC) at Madurai and one Ethno Veterinary Herbal Research Centre for Poultry at Thanjavur.



Tamil Nadu Veterinary and Animal Sciences University

Translational Research Platform for Veterinary Biologicals Training programme on

"CRISPR/Cas based molecular diagnostic platforms"

Applications are invited for admission to a **5 days** hands on training Programme on "CRISPR/Cas based molecular diagnostic platforms" (03.07.2023 to 07.07.2023)

Eligibility criteria: Faculty, Scientist and Research Scholars

- Only Indian nationals are eligible to apply
 - **a.** M.Sc. / M.Tech Animal Biotechnology / Biotechnology / Bioinformatics / Microbiology / Genetic Engineering / Food technology / Biomedical Engineering or other relevant disciplines.
 - M.V.Sc. Animal / Veterinary Biotechnology / Biochemistry / Genetics / Microbiology / Parasitology or other relevant disciplines

Number of participants: 20

Selection criteria: Participants will be selected based on merit, experience and field of research

• Accommodation can be arranged on cost basis (subjected to availability)

Overview of the Training

CRISPR/Cas technology is an emerging genome editing technology with potential applications in functional genomics, transgenic animal technology and molecular diagnostics. CRISPR/Cas-based molecular diagnostic assay has been standardised in TRPVB and TRPVB has the necessary expertise, resource and logistics to conduct a training programme on CRISPR/Cas based diagnostic platform. To popularise this emerging technology among researchers and to create human resource in CRISPR/Cas technology, TRPVB is organising a FIVE days training programme on "CRISPR/Cas based molecular diagnostic platform" from 03.07.2023 to 07.07.2023. The main objective of this training is to give hands on training to the participants on development and application of CRISPR/Cas based diagnostic assays. This training has been planned with 6

lectures and 9 practical classes on identification of PAM/PFS sites, designing guide RNA, synthesis of guide RNA, purification, quantification and storage of gRNA, CRISPR/Cas responsive bio-materials, CRISPR/Cas12a-trans cleavage assay using QPCR, Fluorometer and LFA platforms, results and interpretation. On successful completion of **5 days** training programme, a training certificate will be provided.

Expected outcomes of the training

Skill development on CRISPR/Cas technology and its application in diagnostics

The Project Director

Translational Research Platform for Veterinary Biologicals
Central University Laboratory (CUL) Building,
Centre for Animal Health Studies,
Tamil Nadu Veterinary and Animal Sciences University (TANUVAS)
Madhavaram Milk Colony, Chennai - 600 051
Email: trpvbcrispr23@gmail.com
Phone: 044 - 25556275

About TRPVB

The Translational Research Platform for Veterinary Biologicals (TRPVB) is an unique programme funded by the Department of Biotechnology,

Ministry of Science and Technology, Government of India (DBT, GoI) functioning at Tamil Nadu Veterinary and Animal Science University (TANUVAS) since 2011.

TRPVB's mission is to bridge disconnect between the industry and academia by fostering the culture of 'Productisation' and technology transfer in academic research. Considering the progress and achievements of TRPVB, a Phase II extension was sanctioned by DBT, GoI during 2017 and a Phase III during 2020. During its 9 years of existence TRPVB has developed 42 technologies / products of which 13 technologies have been transferred to industries and commercialised.

TRPVB also produces eleven products for veterinary use and directly supplies them to Department of Animal Husbandry and Veterinary Services, Government of Tamil Nadu

TRPVB has a wide range of expertise from basic research to regulatory compliance. TRPVB has 'state-of-the-art' infrastructures for translational research such as

- 1. TRPVB clean room facility (ISO class 7) 2959 sq.ft.
- **2.** BSL-2 facility for mycobacterium research 753 sq.ft.
- 3. Research laboratory with high end instruments- 3536 sq.ft.
- **4.** DCGI licensed manufacturing facility 1680 sq.ft.
- **5.** Animal Room experimental facility 2700 sq.ft.
- **6.** Administrative Unit 3364 sq.ft.

TRPVB also provides NABL/ISO/IC 17025:2017 accredited diagnostic services for bovine brucellosis and bovine Tritrichomoniasis. Other' one-of its -kind' testing services available at TRPVB include A1/A2 typing of milk samples, Evans Syndrome diagnosis in dogs, Haemoprotozoan disease diagnosis in cattle and dogs, Infectious Bovine Rhinotracheitis (PCR / Serology), Johne's Disease (Serology), etc.,

For Online Registration

Click the Link

 $\frac{https://docs.google.com/forms/d/e/1FAIpQLSdicLgv2EX0YDpEhLKwqaneGJQ_jGNAp_jJzNRu5rTvJNpG_Q/viewform?usp=pp_url}{}$