

Er. Priya Vishnoi

Master of Technology (Biotechnology)

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Gender- Female

Date of Birth- 6/4/1992

Nationality- Indian

Linguistic Proficiency- English, Hindi, and Turkish.

Visa Status- Visit Visa (Valid till 15th March 2022)



Key Skills

- Nucleic acids isolation from tissue samples, blood, serum, wet vaccine virus, etc
- Protein extraction
- Digital PCR, Multiplex PCR, RT-PCR & Real-Time PCR
- Gene Cloning
- Protein Expression and Purification by affinity chromatography
- SDS-PAGE
- Southern and Western Blotting
- Mammalian and insect cells culture
- Different types of ELISA
- Fluorescent Antibody Technique and SNT
- Quality Control testing of vaccines
- Statistical Data Analysis

Soft Skills

- Practical Extraction and Report Language (PERL).
- Knowledge of Bioinformatics: NCBI –Databases, Genbank, PDB (Protein Data Bank), etc.
Tools BLAST, FASTA, Cn3d, CLUSTAL W, Entrez, etc.
- Knowledge of Documentation in MS Word, MS Office, MS Excel, Powerpoint, Data Analysis.

Education

- **Master of Technology (2 years):** Biotechnology- Completed from Jayoti Vidhyapeeth Women's University, Jaipur, Rajasthan in June 2017 and got 72.9%.
- **Bachelor of Technology (4 years):** Biotechnology- Completed from National Institute of Medical Science (NIMS) University, Jaipur, Rajasthan in May 2013 and got 66.30%.
- 12th with PCB from MDIC, Kanth, Moradabad, U.P in 2008 and got 64.4%.
- 10th from HSBB Girls Inter College, Kanth, Moradabad, U.P in 2006 and got 64.83%.

Research and Work Experience

16/3/2021 to 8/12/2021

- The project is entitled “*National Animal Disease Control Programme*”.
- **Designation:** Young Professional-II (Research Fellow)
- **Organization:** Indian Council of Agricultural Research -Indian Veterinary Research Institute, Izatnagar, Bareilly (U.P)

Responsibilities:

- Quality Control testing of Brucellosis (zoonotic) and PPR disease vaccines.

13/11/2018 to 15/3/2021

- The project is entitled “*Development of Alternate Models and National Standards for Quality Control of Veterinary Vaccines and Diagnostics*”.
- **Designation:** Young Professional-II (Research Fellow)
- **Organization:** Indian Council of Agricultural Research -Indian Veterinary Research Institute, Izatnagar, Bareilly (U.P)

Responsibilities:

- Worked on **Stability of live attenuated classical swine fever cell culture vaccine virus in liquid form for developing an oral vaccine.**
- Contributed to vaccine production of Classical swine fever cell culture vaccine.
- **Mammalian and insect Cell culture-** handled PK-15, Vero, MDCK, A72, BHK-21, HEK, and insect cell lines (Sf-9, Sf-21 and Tn-5).
- Development of recombinant baculovirus-based PCV-2 vaccine candidate.
- Infection of CSFV and PCV-II in PK-15 cells, virulent rabies virus in BHK-21, and CAV-I in MDCK cells at desired M.O.I to adapt virus in the cells for vaccine production.
- Titration of CSFV and virulent Rabies virus by an improved version of Fluorescent Antibody Test and CAV-I, PPRV titration.
- **Real-Time PCR-** Developed a correlation of Real-Time PCR with Classical Swine Fever vaccine virus titration in cell culture already done by FAT.
- Checked the limit of detection of Real-time PCR for **CSFV** and **CAV-I**.
- Protein Expression and Purification.
- **Development of ELISA-**
 - **Indirect ELISA** for detection of antibodies against PCV-II, ASFV, PPV, PRRS virus, and **SARS-CoV-2**.
 - **Competitive ELISA** for detection of antibodies against Rabies virus and CSFV.

- **Sandwich ELISA** for antigen detection of Rabies virus, Newcastle Disease Virus, and Infectious Bursal Disease Virus.

Internship/Training

Industry/Lab: S. P Institute of Biotechnology, Jaipur

Role/Tenure: Trainee, July 2011

Description: worked on advanced techniques of biotechnology.

Industry/Lab: Dr B. Lal Institute of Biotechnology

Role/Tenure: Trainee, 1 April to 30 May 2018

Description: done many experiments and techniques during this training program listed below:

- Isolation of DNA from plant cell, bacterial genomic DNA, and Plasmid DNA from Bacterial Cell.
- Agarose Gel Electrophoresis.
- Amplification of DNA using RAPD-PCR.
- Restriction digestion of Lambda DNA using EcoR1 and Hind III.
- Quantitative analysis of DNA by **Spectrophotometry**.
- Amplification testing for **HLA-B27** using **Real-Time PCR**.
- Detection of *Tuberculosis Mycobacterium* using **Real-Time PCR**.
- **Molecular Genetic Assay** for identification of *M. Tuberculosis* and its resistance to **Rifampicin and Isoniazid** using **Multiplex Amplification and Reverse Hybridization**.
- Determine blood group by ABO blood group typing method.
- Determine the concentration of an antigen by **Radial Immuno Diffusion**.
- Determine the concentration of an antigen by **Sandwich Dot ELISA**.
- Isolation of plasma and serum from blood.
- Determine the concentration of Antigen by **Rocket Immuno Electrophoresis**.
- Analyze the Antigen-Antibody interaction using **Ouchterlony Double Diffusion Method**.
- Isolation of serum protein by **Salting Out method**.
- Analyze protein by **SDS-PAGE**.
- Bacterial Culture media preparation.
- Isolation techniques for bacteria.
- Staining techniques.
- Biochemical characterization of Bacteria.
- Antibiotic susceptibility test.

Research activities:

- **Bioethanol production from waste potato mash using *Saccharomyces cerevisiae* (6 months):**
 - **Aim:** The main goal of this research is to utilize waste potato mash as a carbon source for *Saccharomyces cerevisiae* for the fermentation of ethanol.
- **Screening of phytochemicals from 50% hydro-ethanolic and ethanolic leaf and bark extracts of *Terminalia arjuna* and its antifungal and antimicrobial activity (6 months):**
 - **Aim:** The main goal of this research is to qualitative analysis of phytochemicals from 50% hydro-ethanolic and ethanolic extracts of *T.arjuna*.

Publications

- Screening of Phyto-chemical compounds from hydro-ethanolic and ethanolic leaf and bark extracts of *Terminalia arjuna* and *Syzygium cumini*, International Research Journal of Engineering and Technology(IRJET)e-ISSN: 2395 -0056Volume: 04 Issue: 06 | June - 2017www.irjet.netp-ISSN: 2395-0072, Dr Swaati Sharma, Priya Vishnoi.
- Stability of live attenuated classical swine fever cell culture vaccine virus in liquid form for developing an oral vaccine. *Biologicals* (IF 1.801) Pub Date : 2020-09-01, DOI: 10.1016/j.biologicals.2020.07.004
Richa Pachauri, M. Manu, Priya Vishnoi, B Om Preethi, Ashok Kumar Tiwari, Pronab Dhar

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