

## **PROFORMA FOR BIO-DATA**

**1. Name and full correspondence address :-**

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**3. Institution :-**ICAR- National Institute on Foot and Mouth Disease

**4. Date of Joining ICAR and ICAR-NIFMD:** 26<sup>th</sup> June 2025

**5. Academic Qualification (Undergraduate Onwards)**

Exam/Degree	Year	Board/University
Ph. D. (Veterinary Virology)	2013	Indian Veterinary Research Institute, Izatnagar (U.P.)
M.V.Sc. (Veterinary Microbiology)	2009	O.U.A.&T., Bhubaneswar, Odisha
B.V.Sc. & A.H.	2007	O.U.A.&T., Bhubaneswar, Odisha

**6. Other Educational Qualifications and relevant courses**

Course name	Year	Agency/ University
MPI Applied Epidemiology Professional Training Program (August 2023- May 2024)	2024	Massey University, New Zealand
Post Graduate Diploma in Epidemiology (distance learning)	2016	Indian Institute of Public Health, Delhi; Public Health Foundation of India (PFHI)
Post Graduate Diploma in Business Management (distance learning)	2021	Centre for Distance Virtual Learning (CDVL); University of Hyderabad (UoH)
Certificate Programme in Health Care Waste Management	2008	Indira Gandhi National Open University (IGNOU)
Introduction to the FMD Minimum Biorisk Management Standards	2023	European Commission for the control of foot-and-mouth disease (EuFMD)
Ethics Review of Health Research (NIE-ICMR e-course: NIECer 102)	2023	ICMR (Course offered by NIE, Chennai)
Biorisk management (Biosafety, Biosecurity, management of hazardous wastes, DURC, care of biosafety cabinet)	2019	Frontline healthcare workers safety foundation, Georgia, U.S.A.
Foot-and-Mouth Disease Investigation Training Course for South Asia	2018	EuFMD
Foot-and-Mouth Disease Post Vaccination Monitoring	2018	EuFMD

**7. Employment Details (in chronological order):**

Positions held	Name of the Institute	From	To
Research Associate	Haemorrhagic septicaemia project	26.10.2012	31.01.2014

	(AINP-HS) at IVRI, Izatnagar		
Scientist B (Non-Medical)	Rotavirus Project (NHSRN) at RMRC, Bhubaneswar	04.02.2014	20.01.2015
Scientist-I (Animal Health)	National Diary Development Board R&D laboratory, Hyderabad	23.01.2015	31.12.2020
Scientist-II (Animal Health)	National Diary Development Board R&D laboratory, Hyderabad	01.01.2021	25-06-2025
Senior Scientist (Vet Microbiology)	ICAR-National Institute on FMD, Arugul, Bhubaneswar-752050	26-06-2025	Continuing

## 8. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received

- Shortlisted as Consultant (Laboratory Specialist) of Food and Agriculture Organization (FAO), United Nation for strengthening of veterinary laboratories
- University Gold medal in Veterinary Microbiology from O.U.A. &T., Bhubaneswar
- 1<sup>st</sup> rank in Veterinary Microbiology discipline in ICAR - SRF examination and recipient of ICAR SRF fellowship
- 77<sup>th</sup> rank in Life science and awarded CSIR-JRF
- ICAR-NET qualified
- OUAT UG and PG merit scholarship
- IVRI institute fellowship
- Best Poster Award (3rd), IDF-WDS 2018 (South Korea) – Development and Validation of Duplex Real-time PCR for Simultaneous Detection of Brucella and BoHV-1.
- Best Oral Presentation (1st) in Joint Medical and Veterinary Virology session, Virocon 2024 – Development of National Standard Serum for IBR Diagnosis.
- Best Poster Award (3rd) in Veterinary Virology session, Virocon 2024 – Prevalence and Epidemiological Analysis of IBR in India's Dairy Sector.
- Best Oral Presentation (1st), Virocon 2024 – Development and Validation of an ELISA Assay for IBR Diagnosis and DIVA.
- Best Poster Award (1st), Virocon 2020 – Pilot Study on IBR Control Using Inactivated Marker Vaccine in India.
- Best Poster Award (2nd), Virocon 2012 – Amino Acid Substitutions in FMD Virus Serotype O under Vaccinal Serum Antibody Pressure.
- Best Oral Presentation (3rd), IAVMI 2013 – Virulence Gene Profiling and Antibiotic Resistance of *Pasteurella multocida* from Small Ruminants.
- Best Poster Presentation (3rd), IAVMI 2013 – Evidence of Circulation of Multiple Sequence Types of *Pasteurella multocida* in India.

## 9. Publications:

Total Research Publications:	41
Conference/ lead papers:	04
Popular/Semi-technical articles:	27
Research Abstracts:	48
Book chapter:	01
Books:	02

## Top 10 Research publications:

- Chandrasekhar Reddy RV, Thodangala N, Gonuguntla HN, Poojitha GUS, Chandaka KD, Gujjala M, Palamuru P, Surendra KSNL, **Sarangi LN**, Ponnanna NM. (2025). Isolation, identification and extent of positivity of Bubaline alphaherpesvirus 1 (BuAHV1) in India.

*Brazilian Journal of Microbiology* (Accepted). doi: 10.1007/s42770-025-01670-5.

- **Saranghi LN**, Surendra KSNL, Rana SK, Naveena T, Prasad A, Ponnanna NM, Sharma GK (2022). Evaluation of commercial ELISA kits for diagnosis of brucellosis in cattle and buffaloes in different epidemiological scenarios. *Journal of Microbiological Methods*. 195: 106449. doi: 10.1016/j.mimet.2022.106449.
- **Saranghi LN**, Reddy RVC, Rana SK, Naveena T, Ponnanna NM, Sharma GK (2021). Sero-diagnostic efficacy of various ELISA kits for diagnosis of infectious bovine rhinotracheitis (IBR) in cattle and buffaloes in India. *Veterinary Immunology and Immunopathology*. (241): 110324. doi: 10.1016/j.vetimm.2021.110324.
- **Saranghi LN**, Nazia T, Supriya P, Rana SK, Naveena T, Bahekar VS, Prasad A, Reddy RVC, Surendra KSNL, Hariprasad NG, Ponnanna NM, Sharma GK (2021). Infectious bovine abortions: observations from an organized dairy herd. *Brazilian Journal of Microbiology*. 52(1): 439-448. doi: 10.1007/s42770-020-00414-x.
- **Saranghi LN**, Rana SK, Dash SK, Bhattacharya K, Naveena T, Shroff AI, Reddy RVC, Prasad A, Surendra KSNL, Bahekar VS, Ponnanna NM and Sharma GK. (2020). Pilot Control of Infectious Bovine Rhinotracheitis through inactivated marker vaccine: a field study in India. *IDF Animal Health Report*. 14: 15-17. (<https://store.fil-idf.org/product/idf-animal-health-report-n-14/>)
- Reddy RVC, Bajibabu P, **Saranghi LN**, Rana SK, Surendra KSNL, Ponnanna NM and Sharma GK. (2020). Shedding of bovine alphaherpesvirus-1 in bovine extended frozen semen in Indian semen stations: A longitudinal analysis. *Theriogenology*. 157: 467-471. doi: 10.1016/j.theriogenology.2020.08.021
- **Saranghi LN**, Naveena T, Rana SK, Surendra KSNL, Reddy RVC, Bajibabu P, Ponnanna NM, Sharma GK, Srinivasan VA (2018). Evaluation of a specialized filter-paper matrix for transportation of extended bovine semen to screen for bovine herpesvirus-1 by real-time PCR. *Journal of Virological Methods*. 257: 1-6. doi: 10.1016/j.jviromet.2018.03.009.
- **Saranghi LN**, Thomas P, Gupta SK, Kumar S, Viswas KN and Singh VP (2016). Molecular epidemiology of *Pasteurella multocida* circulating in India by Multilocus sequence typing. *Transboundary and Emerging Diseases*. 63: e286-e292. doi: 10.1111/tbed.12270.
- **Saranghi LN**, Thomas P, Gupta SK, Priyadarshini A, Kumar S, Viswas KN, Kumar A and Singh VP (2015). Virulence Gene Profiling and Antibiotic Resistance Pattern of Indian Isolates of *Pasteurella multocida* of Small Ruminant Origin. *Comparative Immunology Microbiology and Infectious Diseases*. 38: 33-39. doi:10.1016/j.cimid.2014.11.003
- **Saranghi LN**, Mohapatra JK, Subramaniam S, Sanyal A and Pattnaik B (2013). Antigenic site variation in foot-and-mouth disease virus serotype O grown under vaccinal serum antibodies *in vitro*. *Virus Research*. 176: 273-279. doi: 10.1016/j.virusres.2013.07.003.

## 10. Research Interest:

Disease Diagnostics and Epidemiology, Control and prevention of diseases

## 11. Major Research Projects:

Title of the project	Sponsoring agency & period	Capacity
World Organization for Anima Health (WOAH) laboratory twinning project between NDDB R&D laboratory, India and APHA, U.K. (NDDB & APHA)	NDDB (2023-2025)	PI
Development and validation of the BoHV-1 gE (DIVA)	NDDB (2020-	PI

ELISA for IBR diagnosis (NDDB & IIL)	2023)	
Development of a monoclonal antibody (Mab) based SPCE assay for seromonitoring (NDDB & IIL)	NDDB (2021-2023)	PI
Control of Infectious Bovine Rhinotracheitis through inactivated marker vaccine: a field study in India (NDDB & APLDA, SAG, Banaskantha milk Union)	NDDB & World Bank (NDP-I) (2017-2019)	Co-PI
Evaluation of commercially available ELISA kits for diagnosis of IBR and Brucellosis in Indian cattle and buffaloes (fitness of purpose)	NDDB (2017-2019)	PI
Development of duplex real time PCR for simultaneous detection of Brucella and BHV-1 from clinical specimen	NDDB (2017-2018)	PI
Studies on infectious bovine abortion in an organized dairy herd	NDDB (2016-2018)	PI
Cross sectional serosurvey for detection of anaplasma parasite, Blue tongue virus, akabane virus and bovine leukosis virus in cattle and buffalo	NDDB (2015-2017)	PI
Evaluation of Novel methods for transport of semen batches for testing against BoHV-1	NDDB (2015-2017)	PI

## **12. Innovative technologies/concepts/products/database developed:**

- Developed and validated a duplex real-time PCR assay for simultaneous detection of Brucellosis and IBR in clinical samples.
- Developed and validated a monoclonal antibody-based gE ELISA test for DIVA-based diagnosis of Infectious Bovine Rhinotracheitis.
- Developed a monoclonal-based SPCE for detecting serotype O-specific antibodies of Foot-and-Mouth Disease.
- Evaluated a filter paper matrix method for safe frozen semen shipment with BHV-1 detection capability.
- Enhanced serological testing strategies to improve accuracy in Brucellosis and IBR diagnosis.
- Implemented the first pilot field study for IBR control using an inactivated gE-deleted marker vaccine.
- Implemented IBR control strategy in semen stations to achieve disease-free status

## **13. Any other Information:**

- Technical Manager of NRRB R&D laboratory, Hyderabad as per ISO 17025:2017 (NABL) from September 2018 to June 2025; Deputy Technical Manager of NRRB R&D laboratory, Hyderabad as per ISO 17025:2015 (NABL) from December 2015 to September 2017.
- Section-in-charge (Virology and Molecular biology section) of NDDB R&D laboratory, Hyderabad as per ISO 9001:2015 from September 2015 to September 2023.
- Students guided: 09 (M.Sc./ M.Tech in Microbiology/ Biotechnology of JNTU, Hyderabad)
- Actively involved in import of bulls and semen: Gir semen doses from Brazil; HF and Jersey bulls from Germany and Denmark.
- Program Coordinator for International Workshop on Diagnosis of Infectious Bovine

Rhinotracheitis from 04-08<sup>th</sup> March 2024.

- International Seminar on diagnosis and control of infectious bovine rhinotracheitis held on 28<sup>th</sup> January 2025 at NDDB, Anand.
- Development of complete digital farmer centric end-to-end digital ecosystem for the livestock sector under “National Digital Livestock Mission”: Domain expert (Research laboratory) for Development of laboratory module (Domain expert; Research laboratory).
- *Membership of Professional Bodies:* Life member of Odisha Veterinary Council, Veterinary Council of India, Odisha Bigyan Academy, Indian Science Congress Association, Association of Microbiologist of India, Indian Virological Society, IAVMI, IAAVR, Indian Dairy Association