Dr. Biswa Ranjan Maharana

Designation	Senior Scientist
	**Department of Veterinary Parasitology** **Haryana Pashu Vigyan Kendra, Lala Lajpat Rai University of Veterinary & Animal Sciences (LUVAS), Uchani, Karnal–132001, Haryana, India** Mobile: +91-8128154595/8650924354 E-mail: drbiswaranjanmaharana@gmail.com/drbiswaranjan@luvas.edu.in
Educational Qualifications	• 2015 – Ph.D. in Veterinary Parasitology, ICAR–Indian Veterinary Research Institute (IVRI), Izatnagar, Uttar Pradesh • 2009 – M.V.Sc. in Veterinary Parasitology, ICAR–IVRI, Izatnagar, Uttar Pradesh • 2006 – B.V.Sc. & A.H., College of Veterinary Science, Odisha University of Agriculture and Technology (OUAT), Bhubaneswar
Employment Details	• Scientist, Haryana Pashu Vigyan Kendra, LUVAS, Karnal: 23 May 2016 – continuing • Assistant Professor, Junagadh Agricultural University (JAU), Junagadh: 11 August 2011 – 19 May 2016
Research Interests	• Molecular epidemiology, systematics and evolution of parasites • Molecular and immunodiagnostics • Development and application of molecular tools for detection and characterization of veterinary parasites
Student guided	• As Major Advisor: 02M.V.Sc. • As Co-Major Advisor: 3 Ph.D. students • As Member Advisory Committee: 5 students
Research Projects	• Principal Investigator: HSCSIT (DST–Haryana)-funded project, "Elucidating the role of circulatory miRNA as a possible biomarker in bovine theileriosis" (budget: ₹44.0 lakh; 2022–2025). • Principal Investigator: Development and evaluation of a real-time PCR (qPCR) assay for quantitative detection of Theileria annulata in cattle. • Principal Investigator: Development and standardization of a nucleic acid-based assay for detection of Theileriaequi and characterization of prevailing genotypes in equine blood samples. • Co-Principal Investigator: Investigation of alterations in cardiac biomarkers and acute-phase protein profile in cattle naturally infected with tropical theileriosis as indicators of animal welfare. • Co-Principal Investigator: Study on melatonin therapy to ameliorate ischemia-reperfusion-induced damage in uterine torsion-affected buffaloes.
	Total Research Papers Published: 60 **>8.0 NAAS rating:** 13 **6-8 NAAS rating:**25 **Google Scholar index Research Citations**: 1530 **h-index:**21 **i-10index:**35	**Books Published: 06** **Book Chapters:**35 **Practical/Training Manuals: 08**	**PopularArticles:** 15 **Gene Sequences Submitted:** 65 **Seminar/ Conference Attended:** 20

Ten Best Research publications	1. Maharana, B. R., Malik, R., Ganguly, A., Kumar, A., Kumar, B., Singh, H., Potliya, S., Khanna, S., & Dehuri, M. (2026). Geographical distribution and genotypic diversity of *Theileria orientalis* with emphasis on Indian isolates. Scientific Reports, 10.1038/s41598-026-61033-4. (NAAS:10.9) 2. Maharana, B. R., Ganguly, A., Malik, R., Kumar, A., Khanna, S., Kumar, B., Potliya, S., Singh, H., Dash, A., & Sahu, S. (2026). Comprehensive molecular characterization of *Theileria equi*: Detection, genetic diversity, and risk factors assessment. Experimental Parasitology, 284, 109135. https://doi.org/10.1016/j.exppara.2026.109135 (NAAS:7.9) 3. Malik, R., Maharana, B. R., Ganguly, A., Vohra, S., Kumar, B., Kumar, A., Singh, H., Potliya, S., Khanna, S., & Sahu, S. (2025). Molecular Epidemiology and Genotypic Diversity of *Theileria annulata* among Bovines Based Upon Tams1 Gene in India. Acta Parasitologica, 70(2), 81. https://doi.org/10.1007/s11686-025-01014-1 (NAAS:7.5) 4. Nangru, A., Maharana, B. R*., Vohra, S., Kumar, B., Ganguly, A., Sahu, S., Singh, H., Ruhil, S., &Khichar, V. (2023). Identification, molecular characterization and risk factors of Theileria infection among sheep: a first comprehensive report from North India. Animal Biotechnology, 34(8), 3658–3670. (NAAS: 9.7) 5. Maharana, B. R., Ganguly, A., Potliya, S., Kumar, B., Singh, H., Dash, A., & Khanna, S. (2024). Molecular detection and characterization of prevailing Theileriaequi genotype in equine from northern India. Research in Veterinary Science, 173, 105277. (NAAS: 8.40) 6. Maharana, B. R*., Sudhakar, N. R., Jawalagatti, V., Saravanan, B. C., Blake, D. P., & Tewari, A. K. (2020). Evaluation of the immunoprotective potential of recombinant paraflagellar rod proteins of Trypanosoma evansi in mice. Vaccines, 8, 84. (NAAS: 13.80) 7. Nangru, A., Maharana, B. R*., Vohra, S., & Kumar, B. (2022). Molecular identification of Theileria species in naturally infected sheep using nested PCR-RFLP. Parasitology Research, 121(5), 1487–1497. https://doi.org/10.1007/s00436-022-07489-5 (NAAS: 8.0) 8. Nangru, A., Maharana, B. R*., Vohra, S., Kumar, B., & Ganguly, A. (2022). Molecular detection and differentiation of different Theileria species in naturally infected goats using nested PCR-RFLP: A first report from Northern India. Acta Parasitologica. (NAAS: 7.50) 9. Maharana, B. R., Potliya, S., Ganguly, A., Bisla, R. S., Mishra, C., & Ganguly, I. (2020). First report of the isolation and phylogenetic characterization of equine *Setaria digitata* from India based on mitochondrial COI, 12S rDNA, and nuclear ITS2 sequence data. Parasitology Research, 119(2), 473–481. (NAAS: 8.0) 10. Maharana, B. R., Gupta, S., Gupta, S., Ganguly, A., Kumar, B., & Bisla, R. S. (2021). First report of molecular and phylogenetic analysis of *Physaloptera praeputialis* in naturally infected stray cats from India. Parasitology Research. https://doi.org/10.1007/s00436-021-07163-2 (NAAS: 8.0)
IPR Granted	1. Copyright granted: Copyright registered for the work titled "Cattle Welfare Indicators Module" with the provisions of the Copyright Act, 1957 wide Application No.: 8138/2025-CO/L; Date of ROC: 27/05/2025.Copyright granted: 2. Copyright registered for the work titled " THEILERIA CDSS CLINICAL DECISION SUPPORT SYSTEM" with the provisions of the Copyright Act,1957 wide Application No.: SW-20885/2026-CO; Date of ROC: 11/06/2026.
Awards/ Fellowships/ Recognition received	1. University Merit Scholarship during B.V.Sc. & A.H programme 2000-2005. 2. Best Scientist Award in Veterinary Parasitology by IMRF, Chandigarh, 2017. 3. DBT-CTEP international travel grant fellowship award by DBT, Govt. India, 2017. 4. Qualified National Eligibility test by CSIR, 2009 5. Qualified National Eligibility test by ASRB in Veterinary Parasitology, 2010. 6. Ahluwalia Memorial Best Article Award by IAAVP in 2011. 7. Best Poster award by XXII National Symposium at Mathura in 2012. 8. Best Poster award by XXIV National Symposium at Manuty in 2014. 9. Best Oral presentation award by XXV National Symposium at Chennai in 2016. 10. Best Poster award by XXV National Symposium at Chennai in 2016. 11. Best Oral Presentation at XXVI NCVP and International symposium, Shivamoga 2017. 12. Best Oral Presentation at XXVIII NCVP and International symposium, Tirupati 2019 13. Best Poster Presentation at XXVIII NCVP and International symposium, Tirupati 2019 14. Best Oral Presentation at XIX NCVP and International symposium, Jabalpur 2020 15. Conferred First Prize in Induction Training Programme organized by Director HRM, LUVAS. 16. Best presentation award at 3rd convention of SVBBI, LUVAS, Hisar, 2018. 17. Executive member, Indian Association for Advancement of Veterinary Parasitology, 2020 18. Member of National Academy of Veterinary Science, 2020 19. Certificate of Appreciation for the research work on ‘Assessment of irradiation attenuated *T.evansi*

	induced protective immune response in murine & rabbit model' at 26th International conference of WAAVP, Kualalumpur, Malaysia, 4-8th Sept. 2017. 20. Certificate of Appreciation for the research work on 'Assessment of comparative immunoprophylactics efficacy of gamma irradiated *T.evansi* and recombinant PFR in murine model' at 26th International conference of WAAVP, Kualalumpur, Malaysia, 4-8th Sept. 2017. 21. Appreciation certificate from worthy Vice-chancellor, LUVAS, Hisar as front-line animal welfare worker during COVID19 pandemic. 22. Awarded as Associate Fellow of National Academy of Dairy Science (India), since 2019 23. Awarded '**Dr. V. S. Alwar Best Research Article Award'** by Indian Association for advancement of Veterinary Parasitology during XXX NCVP and symposium at college of Veterinary Science & A.H., Parbhani, Dec. 2021. 24. Acting as rapporteur/co-chairman in various technical/scientific sessions 25. Best poster presentation award at XXX NCVP and symposium at college of Veterinary Science & A.H., Parbhani, 14th to 16th Dec. 2021. 26. Best oral presentation award at AAVASILE International Conference organised by ICAR-IGFRI, NADCL and NAHEP at Srinagar, Kashmir28th to 30thSept. 2022. 27. Best oral presentation award at XXXI NCVP and symposium at college of Veterinary Science & A.H., Bhubaneswar, Odisha 6th to 8th Dec. 2022. 28. Best Poster presentation award at XXXI NCVP and symposium at college of Veterinary Science & A.H., Bhubaneswar, Odisha 6th to 8th Dec. 2022. 29. Best Oral presentation award at XXXII NCVP and symposium at college of Veterinary Science & A.H., BASU, Patna29thNov to 1stDec. 2023. 30. Best Poster presentation award at XXXII NCVP and symposium at college of Veterinary Science & A.H., BASU, Patna29thNov to 1stDec. 2023. 31. Awarded Dr. KalyanaSundaram Memorial Award for outstanding contribution in field-oriented research by IAAVP, 2024. 32. Awarded Dr. D.P.Banerjee Memorial Award for outstanding contribution in Veterinary Protozoology by IAAVP, 2025. 33. Awarded Dr. A.K.Mishra Research Memorial Award for outstanding Research Article in Veterinary Protozoology by IAAVP, 2026.
Professional Memberships	• Indian Association for Advancement of Veterinary Parasitology (Life Member) • Indian Society of Parasitology (Life Member) • Indian Veterinary Council; Haryana Veterinary Council • Alumni Association, LUVAS, Hisar (Life Member) • Laboratory Animal Sciences Association of India (Life Member) • Indian Buffalo Congress (Life Member) . World Association for the Advancement of Veterinary Parasitology (Life Member)
Editorial Responsibilities	• Associate Editor: Journal of Veterinary Parasitology (IAAVP) • Associate Editor: Modern Agriculture (Wiley) • Associate Editor: BMC Veterinary Research (Springer) • Associate Editor: International Journal of Parasitology (Elsevier)
E-learning	Content creator for the e-course "Veterinary Entomology and Acarology" on the e-learning portal under ICAR–NAHEP Component 2.
Books	• Vet Rapidex: A Ready Reckoner to Veterinary Science, Animal Science, Animal Biochemistry and Biotechnology (2017), Kalyani Publishers. ISBN: 978-93-272-6903-1. • Vet Parasit: A Question Bank (2013), Kalyani Publishers. ISBN: 978-93-272-3476-3. • Veterinary Parasitology: A Complete Objective Type Guide (2017), Kalyani Publishers. ISBN: 978-93-272-7635-0. • Veterinary Parasitology: A Clinical Laboratory Manual (2019), Kalyani Publishers. ISBN: 978-93-5359-371-1. • Fundamentals of Veterinary Parasitology (2022), Satish Publishers. ISBN: 978-93-9066-063-6.
Research Sequences	More than 60 gene sequences reported in NCBI GenBank relating to molecular characterization of economically important parasites, including *Theileria annulata, Toxoplasma gondii, Haemonchus contortus and Trypanosoma evansi.*
Other Contributions	• Organized three professional trainings; delivered 37 invited lectures and six lead papers. • Served as reviewer for 12 referred national/international journals. • Diagnostic Lab-Incharge, HPVK, Karnal