Dr Poonam Ratwan

Designation	**Scientist**
	Department of Animal Genetics & Breeding Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Hisar -125004 (Haryana) India Phone: 01662-256119(O) Mobile: +919816089896 E-mail: poonamratwan@luvas.edu.in
Educational Qualifications	• 2018: Ph.D., AGB, ICAR-NDRI, Karnal • 2015: M.V.Sc., AGB, ICAR-NDRI, Karnal • 2013: B.V.Sc. & A.H., CoVAS, CSKHPKV, Palampur (H.P.)
Employment Details	• Scientist, Department of Animal Genetics and Breeding, LUVAS: 19.06.2018 -Continuing
Research Interests	• Animal Breeding • Animal Genetics • Animal Cytogenetics • Poultry Breeding
Students Guided	• As Major Advisor: 02 M.V.Sc. • As Member Advisory Committee: 12 students
Research Projects Handled/Undergoing	• DST project- Molecular interventions to increase litter size in pigs for improving socioeconomic status of rural Scheduled Caste families in Haryana (Co-PI) • HSCSIT project- Molecular interventions to improve reproductive efficiency in Murrah buffaloes (Co-PI) • RKVY project: Improving Livelihood security of rural scheduled caste families through backyard poultry farming in Haryana state (Co-PI) • Institutional Project - Cytogenetic analysis of bovine monster calf and dam of Haryana region (Co-PI) • ICAR-AICRP Project - Network Project on Buffalo Improvement (Co-PI) • State Scheme - Genetic Improvement in Poultry and Different Species of Livestock. C (a) AGB-4 Plan (Vety.) (146) (In-charge Poultry Section) • Self-Finance Scheme - Propagation & Dissemination of Superior Germplasm of Chickens and skill development in various domains of Animal Genetics and Breeding (SF-51) (In-charge Poultry Section)

Publications	**Total Research Papers Published: 52** **Google Scholar index** **Research Citations: 922** **h-index: 15** **i-10index: 18**	**Compendium chapter: 04** **Practical/Training Manuals: 05** **ICAR-NDRI News Letter: 01** **Conference full length paper: 01**	**PopularArticles: 25** **Review Articles: 08** **Seminar/ Conference Attended: 15** **Trainings/short term courses attended: 09**

- Ratwan, P., Kumar, M. and Chakravarty, A. K. (2024). Bayesian approach for assessment of co-variances and genetic parameters of production and reproduction traits in Sahiwal cattle. Trop Anim Health Prod. 56:299. https://doi.org/10.1007/s11250-024-04148-y (NAAS Rating: 7.7).
- Sheoran, N.K., Ratwan, P., Kumar, M., Rathi, V. and Dahiya S. (2025). Exploration of Genetic Variability in Stearoyl-CoA Desaturase 1 (SCD1) Gene and Association of Its Variants with Production and Reproduction Traits in Murrah Buffaloes. Reprod Domest Anim. 60(6): e70078. doi: 10.1111/rda.70078. PMID: 40432321. (NAAS Rating: 7.7)
- Solanki, R., Dhaka, S.S., Ratwan, P., Singh, M. and Kumar, M. (2025). Identification of IGFBP2 gene polymorphism and association of genotypes with performance traits in Large White Yorkshire pigs. Trop Anim Health Prod. 57(6): 286. doi: 10.1007/s11250-025-04539-9. PMID: 40555891. (NAAS Rating: 7.7)
- Kaur, S., Ratwan, P., Kumar, M. and Singh, A. (2024). Overview of performance and genetic parameters of economic traits in Indian native chicken breed. World's Poultry Science Journal, DOI: 10.1080/00439339.2024.2309528. (NAAS rating: 9.5)
- Ratwan, P., Kumar, M. and Mandal, A. 2022. Bayesian approach for genetic analysis of production and reproduction traits in Jersey crossbred cattle. Zygote doi:10.1017/S0967199422000120. (NAAS :7.4)
- Ratwan, P., Chakravarty, A. K. and Kumar, M. (2022). Evaluation of relative economic value of performance traits in Sahiwal cattle. Indian J. Anim. Sci. 92(10): 1228-1232. (NAAS = 6.3).
- Kumar, M., Vohra, V., Ratwan, P. and Kumar, A. (2023). Comparative analysis of various methods for estimating expected genetic gain of production and reproduction traits in Murrah buffaloes. Anim. Biotechnol., DOI: 10.1080/10495398.2023.2184378. (NAAS: 7.8)
- Kumar, M., Vohra, V., Ratwan, P. and Lathwal, S. S. (2022). Genetic analysis of milk and milk composition traits in Murrah buffaloes using Bayesian inference. Anim. Biotechnol., DOI: 10.1080/10495398.2022.2130797. (NAAS: 7.8)
- Kumar, M., Vohra, V., Ratwan, P., Gowane, G. R. and Malhotra, R. (2022). Sustainable multi-trait selection index based on production, reproduction, and health traits for genetic improvement of Murrah buffaloes Anim. Biotechnol., DOI: 10.1080/10495398.2022.2101117 (NAAS = 7.8)
- Kumar M., Dahiya S. P., Poonam Ratwan, Sheoran N., Kumar S. and Kumar N. (2022). Assessment of egg quality and biochemical parameters of Aseel and Kadaknath indigenous chicken breeds of India under backyard poultry farming. Poultry Science 101(2): 101589 (NAAS Rating: 10.2)
- Kumar, M., Ratwan, P., Dahiya, S.P. and Nehra, A.K. (2021). Climate change and heat stress: Impact on production, reproduction and growth performance of poultry and its mitigation using genetic strategies. Journal of thermal biology 97: 102867. (NAAS Rating: 8.9)

IPRs granted	-
Awards/ Fellowships/ Recognition received	• Selected as Scientist in Agricultural Research Services (ARS) – 2016 • Qualified CSIR-JRF NET, CBSE-UGC JRF NET and ICAR- ASRB NET • ICAR-SRF selected (2nd Rank) and UGC fellowship during Ph.D. programme • Ph.D. thesis nominated for best thesis award • ICAR-NDRI fellowship during M.V.Sc. programme • Best Thesis Appreciation Award (M.V.Sc.) • Best poster presentation awards – 09 • Certificate of Honour (B.V.Sc. & A.H.)
Membership of Professional Scientific Societies	• Life time membership of Society for Conservation of Domestic Animal Biodiversity • Life time membership of Indian Society of Animal Genetics and Breeding • Veterinary Council of India • Haryana Veterinary Council
Editorial board of Scientific Journal	• Associate Editor, Pashudhan Gyan Magazine
Reviewer of Scientific Journals	• Scientific Report • Journal of Thermal Biology • Livestock Science • Tropical Animal Health and Production • Veterinary Medicine and Science • Journal of Applied Animal Research • Haryana Veterinarian • Agricultural Systems • Animals • Gene • Veterinary and Animal Science • Applied Animal Behaviour Science • Biology • Journal of Animal Breeding and Genetics
Any Other (if any)	• In charge Poultry Section, LUVAS, Hisar • In charge cytogenetic laboratory, Department of AGB, LUVAS, Hisar • Member IKS cell, LUVAS, Hisar