Dr Anil Chitra

Designation	**Scientist**
	Department of Animal Genetics and Breeding Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Hisar -125004 (Haryana) India Phone: 01662-256119(O) Mobile: +918208731246 E-mail: yogeshbangar07@luvas.edu.in
Educational Qualifications	• 2026: Ph.D., AGB, NDRI, Karnal • 2015: M.V.Sc., AGB, NDRI, Karnal • 2013: B.V.Sc. & A.H., LUVAS, Hisar
Employment Details	• Scientist, Department of Animal Genetics and Breeding, Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Hisar -125004 (Haryana) India • 02.11.2018 -continuing
Research Interests	• Animal Genomics and Molecular Genetics • Population Genomics and Genomic Selection • Machine Learning, Bioinformatics and Computational Genomics in Livestock Research
Students Guided	-
Research Projects Handled/Undergoing	• Institutional Project - Association of THI with thermo-tolerance traits in dairy cattle (PI) • ICAR-AICRP Project - ICAR-Sahiwal Data Recording Unit (Co-PI) • State Scheme - Genetic Improvement in Poultry and Different Species of Livestock (Co-PI) • State Scheme - Conservation and Genetic Improvement of Indigenous Livestock Breeds (Co-PI) • State Scheme - Establishment of an Elite Herd of Sahiwal Cattle for Conservation, Genetic Improvement and Dissemination (Co-PI)

Publications	**Total Research Papers Published: 14** **>8.0 NAAS rating: 03** **6-8 NAAS rating: 07** **Google Scholar index** **Research Citations**: 94 **h-index**: 05 **i-10index**: 02	**Book Chapters:** 05 **Practical/Training Manuals:**	**PopularArticles: 13** **Seminar/Conference/training Attended:** 05

1. Chitra, A., Dhaka, S.S., Bangar, Y.C. et al. Comparative study of hematological responses to thermal stress in Sahiwal and Hardhenu calves. Trop Anim Health Prod 58, 430 (2026). https://doi.org/10.1007/s11250-026-05235-y
2. Kumar, I., Vyas, J., Khan, A. et al. Influence of genomic retained heterosis on lactation persistence and tropical resilience: leveraging joint-model GWAS to quantify non-additive variance in India's Karan Fries population. Trop Anim Health Prod 58, 439 (2026). https://doi.org/10.1007/s11250-026-05207-2
3. Vyas, J., Kumar, I., Chitra, A., Ramola, G., Mukherjee, S., Ganguly, I., ... & Mukherjee, A. (2025). Longitudinal genomic and pedigree inbreeding metrics reveal inbreeding depression in milk quality traits of Sahiwal cattle maintained in organised herd. The Nucleus, 1-23. DOI: https://doi.org/10.1007/s13237-025-00611-9 **(NAAS rating: 8.10)**
4. Chitra, A., Ilayaraja, I., Vyas, J., Mukherjee, S. and Mukherjee, A. (2025). Genetic Evaluation of Reproductive Performance and Milk Production in Sahiwal Cows. Indian Journal of Animal Research. 1-7. doi: 10.18805/IJAR.B-5689. **(NAAS: 6.50)**
5. Chitra, A., Vyas, J., Kumar, I., Mukherjee, S., & Mukherjee, A. (2025). Optimization of longitudinal lactation length in a Sahiwal herd. Journal of Livestock Science, 16, 614-621. doi. 10.33259/JLivestSci.2025.614-621 (**NAAS Rating- 6.50)**
6. Vyas, J., Khatri, M., Sharma, S. K., Kumar, I., Chitra, A., Khan, A., ... & Mukherjee, A. (2026). Characterization, modelling and evaluation of various lactation curve functions for historical milk composition traits in Sahiwal cattle. Tropical Animal Health and Production, 58(2), 59. https://doi.org/10.1007/s11250-026-04852-x. (**NAAS Rating – 7.70)**
7. Kumar, M. R., Patil, C. S., Yadav, A. S., Bangar, Y. C., & Chitra, A. (2024). Estimation of the seminal parameters of rooster and its association with fertility traits in synthetic dam line. Tropical Animal Health and Production, 56(1), 17. https://doi.org/10.1007/s11250-023-03867-y. **(NAAS Rating – 7.70)**
8. Muansangi, L., Tiwari, J., Ilayaraja, I., Kumar, I., Vyas, J., Chitra, A., ... & Mukherjee, S. (2025). DCMS analysis revealed differential selection signatures in the transboundary Sahiwal cattle for major economic traits. Scientific Reports, 15(1), 15685. https://doi.org/10.1038/s41598-025-93021-5. **(NAAS Rating – 9.80)**
9. Ilayaraja, I., Chitra, A., Vyas, J., Kumar, I., Muansangi, L., Singh, S. P., ... & Mukherjee, S. (2025). Improved Genetic Evaluation in Karan Fries Cattle using multi-trait single-step Genomic Best Linear Unbiased Prediction Method. animal, 101692. 10.1016/j.animal.2025.101692. **(NAAS Rating – 10.20)**
10. Vyas, J., Kumar, I., Chitra, A., Mukherjee, S., Ganguly, I., & Mukherjee, A. (2025). Variation in genetic diversity evaluated under different breeding schemes in Sahiwal herd. Tropical Animal Health and Production, 57(7), 318. https://doi.org/10.1007/s11250-025-04564-8. (NAAS Rating – 7.70)

IPRs granted	-
Awards/ Fellowships/ Recognition received	• Appreciation from Vice-Chancellor, LUVAS, Hisar for contribution done during COVID-19 pandemic.
Membership of Professional Scientific Societies	• Member of Society for Conservation of Domestic Animal Diversity (SOCDAB) • Member of Veterinary Council of India, New Delhi • Member of Haryana State Veterinary Council, Panchkula, Haryana
Editorial board of Scientific Journal	-
Reviewer of Scientific Journals	• Tropical Animal Health and Production • Frontier in Animal Genetics • Haryana Veterinarian
Any Other (if any)	