

Brief Biodata

Name	:	Dr. Snehasmita Panda	
Designation	:	Scientist	
Discipline	:	Animal Genetics and Breeding	
Email	:	sneha.smita@icar.org.in	
Mobile	:	9437330492	

★ **Education qualification** *(Graduation on wards)*

Degree	Subject (s)	Institute
Ph D	Animal Genetics and Breeding	IVRI Deemed University — Bareilly, UP
MVSC	Animal Genetics and Breeding	IVRI Deemed University — Bareilly, UP
B.V.Sc & A.H.	Veterinary Science & Animal Husbandry	College of Veterinary Science & Animal Husbandry — Bhubaneswar, Odisha

❖ **Area of research**

✚ Dr. Snehasmita Panda's research focuses on Animal Genetics and Breeding, with particular emphasis on quantitative genetics, genetic evaluation, genomic analysis and conservation of animal genetic resources. Her work integrates statistical and genomic tools to improve productivity in livestock species, including cattle, goats, pigs and poultry. Her research interests also include genetic diversity assessment, copy number variation analysis, SNP-based studies, growth and production trait evaluation, biometric data analysis and the application of advanced computational approaches in animal breeding.

❖ **Fellowships/Awards etc. (Not more than five)**

1.	Distinction in BVSc & AH (OGPA 8.23) , awarded by Odisha University of Agriculture and Technology (OUAT), 2016.
2.	Best Student Award (Bronze Medal) in MVSc , awarded by ICAR–Indian Veterinary Research Institute (IVRI), 2017–2018.
3.	S.S. Prabhu Award for Best PhD Scholar in Animal Genetics and Breeding , awarded by ICAR–Indian Veterinary Research Institute (IVRI) for the academic session 2021–2022.
4.	First Prize in Oral Paper Presentation at the XIX SOCDAB National Symposium, organized by the Society for Conservation of Domestic Animal Biodiversity, 21–22 September 2022.
5.	First Prize in Oral Presentation at the XXII Annual Convention of SOCDAB and National Symposium on Management of Native Animal Genetic Resources (AnGR), 21–22 January 2025.

❖ **Patent / Technologies / Methodologies / System etc. (Not more than five) :**

1.	Nil
-----------	-----

❖ **Selected Publications: (Max. 20)**

1.	Panda, S., Kumar, A., Gaur, G.K., Ahmad, S.F., Chauhan, A., Mehrotra, A. and Dutt, T., 2022. Genome wide copy number variations using Porcine 60K SNP Beadchip in Landlly pigs. <i>Animal Biotechnology</i> , 33, pp.1–9.
2.	Panda, S., Gaur, G.K., Chauhan, A., Kar, J. and Mehrotra, A., 2021. Accurate assessment of body weights using morphometric measurements in Landlly pigs. <i>Tropical Animal Health and Production</i> , 53(3), pp.1–6.
3.	Panda, S., Gaur, G.K., Sahoo, N.R., Ahmad, S.F., Ramachandrappa, P.D. and Bharti, P.K., 2020. Evaluation of animal models for genetic analysis of growth performance in Landlly pigs. <i>Turkish Journal of Veterinary and Animal Sciences</i> , 44(4), pp.910–918.
4.	Preethi, A.L., Tarafdar, A., Ahmad, S.F., Panda, S., Tamilarasan, K., Ruchay, A. and Gaur, G.K., 2023. Weight prediction of Landlly pigs from morphometric traits in different age classes using ANN and non-linear regression models. <i>Agriculture</i> , 13(2), p.362.
5.	Mehrotra, A., Bhushan, B., Karthikeyan, A., Singh, A., Panda, S., Bhati, M., Panigrahi, M., Dutt, T., Mishra, B.P., Pausch, H. and Kumar, A., 2021. Genome-wide SNP data unravel the ancestry and signatures of divergent selection in Ghurrah pigs of India. <i>Livestock Science</i> , 250, p.104587.
6.	Ahmad, S.F., Gaur, G.K., Panda, S., Chauhan, A., Dutt, T. and Bhushan, B., 2022. Bayesian analysis reveals the influence of maternal effect on pre-weaning body weights in Landlly piglets. <i>Zygote</i> , 30, pp.1–8.
7.	Panda, S., Gaur, G.K., Sahoo, N.R. and Saini, B.L., 2019. Association of MC4R, RYR1 and PRKAG3 single nucleotide polymorphisms with body weight in crossbred piglets. <i>Indian Journal of Animal Sciences</i> , 89(5), pp.539–542.
8.	Panda, S., Gaur, G., Sahoo, N., Bharti, P. and Kar, J., 2020. Principal component analysis of morphometric and growth traits in crossbred piglets. <i>Indian Journal of Animal Sciences</i> , 90(8), pp.1168–1171
9.	Naha, B.C., Gaur, G.K., Saini, B.L., Sahoo, N.R. and Panda, S., 2022. Association of SNP markers in different candidate genes with growth performance of Landrace × Ghurrah crossbred pigs. <i>Indian Journal of Animal Sciences</i> , 92(8), pp.976–980.
10.	Rani, C., Chauhan, A., Chauhan, I., Vaishnav, S., Panda, S., Bhushan, B. and Dutt, T., 2024. Genetic analysis for reproductive and longevity traits in Landlly sows. <i>Indian Journal of Animal Sciences</i> , 94(10), pp.859–865.
11.	Ahmad, S.F., Singh, A., Panda, S., Malla, W.A., Kumar, A. and Dutt, T., 2022. Genome-wide elucidation of CNV regions and their association with production and reproduction traits in composite Vrindavani cattle. <i>Gene</i> , 830, p.146510.
12.	Priyadarsini, S., Panda, S., Pashupathi, M., Kumar, A. and Singh, R., 2021. Design of multiepitope vaccine construct against non-typhoidal salmonellosis and its characterization using immunoinformatics approach. <i>International Journal of Peptide Research and Therapeutics</i> , 27(4), pp.2333–2348.
13.	Ahmad, S.F., Singh, A., Deb, C.K., Panda, S., Gaur, G.K., Dutt, T., Mishra, B.P. and Kumar, A., 2023. Evaluation of imputation possibility from low-density SNP panel in composite Vrindavani cattle. <i>Animal Genetics</i> , 54(5), pp.647–648.

14	Tamilarasan, K., Ahmad, S.F., Panda, S., Preethi, A.L., Tarafdar, A., Pandey, H.O. and Gaur, G.K., 2024. Genetic analysis of first lactation and lifetime performance traits in composite Vrindavani cattle: Important considerations for higher milk production. <i>Tropical Animal Health and Production</i> , 56(1), p.31.
15	Karna, D.K., Mishra, C., Dash, S.K., Acharya, A.P., Panda, S. and Chinnareddyvari, C.S., 2024. Exploring body morphometry and weight prediction in Ganjam goats in India through principal component analysis. <i>Tropical Animal Health and Production</i> , 56(8), p.298.
16	Dash, S.K., Panda, S., Karna, D.K., Mishra, C. and Kalaignazhal, G., 2025. Multivariate analysis of morphometric traits of Malkangiri pony—a heritage germplasm of Odisha. <i>Tropical Animal Health and Production</i> , 57(3), p.129.
17	Chhotaray, S., Kumar, S., Panda, S. and Datta, T.K., 2025. Population and pedigree structure analysis unveils the high genetic diversity in the Murrah buffalo population. <i>Tropical Animal Health and Production</i> , 57(6), p.295.
18	Monika, M., Rokade, J.J., Narayan, R., Saxena, V.K., Panda, S. and Gopi, M., 2020. Studies on growth performance and genetic parameters of three varieties of domesticated Japanese quail. <i>Indian Journal of Animal Research</i> , 54(11), pp.1338–1342.
19	Monika, M., Rokade, J.J., Narayan, R., Verma, M.R., Panda, S. and Saharia, J., 2021. Genetic evaluation of egg production and egg quality attributes in Japanese quails through partial periods. <i>Indian Journal of Animal Research</i> , pp.1–8.
20	Rani, C., Chauhan, A., Chauhan, I., Panda, S., Bhushan, B., GAUR, G.K. and Dutt, T., 2025. Survival analysis of length of life and length of productive life in Landlly sows. <i>Indian Journal of Animal Sciences</i> , 95(2), pp.130-135.
★	<u>Full list of Publications (in PDF)</u>
❖ On-going research projects	
	Nil
❖	Research Scholar
	Nil