



DR. NIDHI SUKHIJA

About Scientist-B

Mobile: +917618134570

(Silkworm Breeding and Genetics)

E-mail: nidhisukhija@live.com

Central Tasar Research & Training Institute

Ranchi, India

Career objective Doing my bit to empower rural India

Academic credentials:

Degree	Grade	University/Board/Institute	Year
Matriculation Certificate	9.60	Central Board of Secondary Education	2010
Higher Secondary Certificate	8.82	Central Board of Secondary Education	2012
Bachelor's Degree (B.V.Sc. & A.H.)	7.75	Govind Ballabh Pant University of Agriculture and Technology (GBPUAT), Pantnagar, Uttarakhand	2018
Master's Degree (M.V.Sc.)	8.76	ICAR-National Dairy Research Institute (NDRI), Karnal, Haryana	2020
Doctorate (Ph.D.)	8.52	ICAR-National Dairy Research Institute, Karnal, Haryana	Pursuing 2020-

Internships:

Institute	Training	Duration
Government Veterinary Hospital, Adarshnagar	Clinical training	3 months
IVRI, Bareilly	Biologicals production	1 week
Gobind Ballabh High altitude zoo, Nainital	Wildlife management	1 week
College of Fisheries, GBPUAT, Pantnagar	Fish and duck management	2 weeks

The above-mentioned rotating internships were completed from 20.12.2017 to 23.06.2018.

Completed Machine learning internship by Ineuron (November 2020 to July 2021).

Work experience:

Volunteered for veterinary practice at Thind Dog Hospital, Rudrapur from 1.04.2020 to 5.07.2020 (Covid-19 pandemic).

Skills:

Familiar with Windows 10, Mac and Linux Operating System, MS-Office suite, Animal diagnostics/treatment, bioinformatics and NGS data analysis.

Certifications:

Type	Name	Rank/Award	Level	Year
Poster presentation	DISHA conference	First	National	2021
	ISAGB conference			2021
	Wildlife conference		International	2023
	SOC DAB conference	Second	National	2021
	Hindi Pakhwada	Third	Institutional (NDRI)	2021
Oral presentation	SVBBI conference	First	National	2021
	CAAHASSE conference	Second	International	
	BICRA conference			2022
Workshop lectures	Workshop on Immunogenetics (Czech)	Paper presentation	International	2020, 2021
Thematic writing	Forest Restoration (WII, Dehradun)	First	National	2021
M.V.Sc. and Ph.D.	Dean's Merit	Award	Institutional (NDRI)	2019, 2021
NET	UGC	Qualified	National	2019
	CSIR			2020
	ICAR, ASRB			2021
Debate	Har ghar Tiranga	Second	Institutional (NDRI)	2022
NCC	National Cadet Corp	Certificate B	National	2015
Radio show	Radio programme, Pashu Samridhi: Jeevan mein vriddhi	Appreciation certificate and stipend	Institutional (GBPUAT)	2016

Research papers:

1. Sukhija, N., Malik, A. A., Devadasan, J. M., Dash, A., Bidyalaxmi, K., Ravi Kumar, D., ... & Verma, A. (2024). Genome-wide selection signatures address trait specific candidate genes in cattle indigenous to arid regions of India. *Animal Biotechnology*, 35(1), 2290521.
2. Sukhija, N., Goli, R. C., Sukhija, M., Rathi, P., Jaglan, K., Dash, A., ... & Kanaka, K. K. (2024). Evolutionary stamps for adaptation traced in *Cervus nippon* genome using reduced representation sequencing. *Conservation Genetics Resources*, 16(1), 135-146.

3. George, L., Alex, R., Sukhija, N., Jaglan, K., Vohra, V., Kumar, R., & Verma, A. (2023). Genetic improvement of economic traits in Murrah buffalo using significant SNPs from genome-wide association study. *Tropical Animal Health and Production*, 55(3), 199.
4. Murugesan, K. D., Gupta, I. D., Onteru, S. K., Dash, A., Sukhija, N., Sivalingam, J., & Mohanty, A. K. (2021). Profiling and integrated analysis of whole-transcriptome changes in uterine caruncles of pregnant and non-pregnant buffaloes. *Genomics*, 113(4), 2338-2349.
5. Jaglan, K., Ravikumar, D., Sukhija, N., George, L., Alex, R., Vohra, V., & Verma, A. (2023). Genomic clues of association between clinical mastitis and SNPs identified by ddRAD sequencing in Murrah buffaloes. *Animal Biotechnology*, 34(9), 4538-4546.
6. Sivalingam, J., Niranjana, S. K., Yadav, D. K., Singh, S. P., Sukhija, N., Kanaka, K. K., ... & Singh, A. P. (2024). Phenotypic and genetic characterization of unexplored, potential cattle population of Madhya Pradesh. *Tropical Animal Health and Production*, 56(2), 102.
7. Choudhary, A., Sukhija, N., Kanaka, K. K., Jaglan, K., Devadasan, M. J., Kumar, D. R., ... & Sivalingam, J. Genetic blueprinting of novel and performance traits-related SNPs in Indian Gir cattle using latest reference assembly: ddRAD analysis of Gir cattle for SNP discovery. *Indian Journal of Dairy Science*, 77(1).
8. Sukhija, N., Kanaka, K. K., Jaglan, K., Raj, C., & Sukhija, S. (2023). In-silico Designing and Testing of Multiprotein Vaccine Construct Against Cow Milk Allergy.
9. Dash, A., Sivalingam, J., Bidyalaxmi, K., Sukhija, N., Niranjana, S. K., Tandia, M. S., & Gupta, I. D. (2023). Stepwise Detection of Copy Number Variations in Whole Genome Sequence of Buffalo. *Indian Journal of Veterinary Sciences & Biotechnology*, 19(3).
10. Kanaka, K. K., Sukhija, N., Basavaprabhu, H. N., Nayak, N., Sahu, A. R., Chatterjee, R. N., ... & Sivalingam, J. (2023). Computer-aided design and evaluation of a multi-epitope vaccine for egg allergy.

11. Sukhija, N., Kanaka, K. K., Sukhija, S., Nandhini, P. B., Rathi, P., Vidhyasagar, I. G., ... & Raj, C. (2023). Epitope tailored vaccine construct for goat milk allergy. *Acta Scientific Veterinary Sciences (ISSN: 2582-3183)*, 5(3).
12. Kanaka, K. K., Sukhija, N., Nayak, N., Goli, R. C., Sahu, A. R., & Koloj, S. (2023). Network analysis of beta casomorphin-7 revealed genes and pathways associated with human diseases. *Acta Scientific Veterinary Sciences (ISSN: 2582-3183)*, 5(3).
13. Choudhary, A., Devadasan, M. J., Sukhija, N., Kanaka, K. K., Kumar, D. R., Vineeth, M. R., Surya, T., Verma, A., Niranjana, S. K., & Sivalingam, J. (2023). Genome-wide identification of SNPs and their annotation in Indian Gir cattle. *Cytology and Genetics. (in-press)*

Review papers:

1. Kanaka, K. K., Sukhija, N., Goli, R. C., Singh, S., Ganguly, I., Dixit, S. P., ... & Malik, A. A. (2023). On the concepts and measures of diversity in the genomics era. *Current Plant Biology*, 33, 100278.
2. Sukhija, N., Kanaka, K. K., Chandra, G. R., Kapoor, P., Sivalingam, J., Verma, A., ... & Malik, A. A. (2023). The flight of chicken genomics and allied omics-a mini review. *Ecological Genetics and Genomics*, 100201.
3. Goli, R. C., Sukhija, N., Rathi, P., Chishi, K. G., Koloj, S., Malik, A. A., ... & Kanaka, K. K. (2024). Unraveling the genetic tapestry of Indian chicken: A comprehensive study of molecular variations and diversity. *Ecological Genetics and Genomics*, 100220.
4. Sukhija, N., Kanaka, K. K., Purohit, P. B., Ganguly, I., Malik, A. A., Singh, S., ... & Dash, A. (2023). Mendelism: connecting the dots across centuries. *Cytology and Genetics*, 57(5), 500-516.
5. Kanaka, K. K., Sukhija, N., Sivalingam, J., Goli, R. C., Rathi, P., Jaglan, K., & Raj, C. (2023). Deep Learning in Neural Networks and their Application in Genomics. *Acta Scientific Veterinary Sciences (ISSN: 2582-3183)*, 5(7).

6. Sukhija, N., Kanaka, K. K., Sivalingam, J., Jaglan, K., Rathi, P., Goli, R. C., & Raj, C. (2023). Solutions to Post-GWAS Regulatory Variants in Bovine. *Acta Scientific Veterinary Sciences* (ISSN: 2582-3183), 5(7).

Book Chapters:

1. Sahu, A. R., Kanaka, K. K., Nayak, N., Sukhija, N., & Goli, R. C. (2023). Growth kinetics vis-a-vis Nutritional Security of Indian Poultry Sector: Backyard to Commercial. In S.P. Tiwari, R.K. Sharma, J. Verma, G. Goyal, L. Chouhan, & A. Shinde (Eds.), *Recent advances in avian health and management* (pp. 10-24). Bhopal: Sandarbh Prakashan.
2. Kanaka, K. K., Sukhija, N., Raj, C., Somagond, A., & Vidhyasagar. (2023). Cloning: Methods and Applications in Livestock Perspective. In S. Sreedhar (Ed.), *Current Research in Animal Husbandry and Veterinary Sciences* (Vol. 5). Integrated Publications, India.
3. Kanaka, K. K., Sukhija, N., Dash, A., & Purohit, P. (2022). In situ hybridization and its role in livestock genetics. In K. Vignesh, R. Arunkumar, V. Balamurugan, & T. Suthin Raj (Eds.), *Compendium of Agriculture and Allied Sciences* (Vol. 3). JPS Scientific Publications, India.
4. Sukhija, N., Kanaka, K. K., Dash, A., & Purohit, P. (2022). Recessive Genetic Diseases of Bovines. In K. Vignesh, R. Arunkumar, V. Balamurugan, & T. Suthin Raj (Eds.), *Compendium of Agriculture and Allied Sciences* (Vol. 3). JPS Scientific Publications, India.
5. Sukhija, N., Kanaka, K. K., Raj, C., Vidhyasagar, & Somagond, A. (2022). Gene Transfer Methods and Gene Therapy. In S. Sreedhar (Ed.), *Advances in Veterinary Sciences* (Vol. 16). Akinik publications.
6. Raj, C., Sukhija, N., Kanaka, K. K., Vidhyasagar, Somagond, A. (2022). Advances in Heifer Management. In K. Vignesh, R. Arunkumar, V. Balamurugan, T. Suthin Raj (Eds.), *Compendium of Agriculture and Allied Sciences* (Volume – 3). JPS Scientific Publications, India.
7. Purohit, P., Dash, A., Sukhija, N., & Kanaka, K. K. (2022). Camel genetic improvement with special reference to Amelioration against heat stress. In K. Vignesh, R. Arunkumar, V. Balamurugan, & T. Suthin Raj (Eds.), *Compendium of Agriculture and Allied Sciences* (Vol. 2). JPS Scientific Publications, India.

Popular Articles:

1. Sukhija, N., Chethan Raj, R., Goli, R. C., Jaglan, K., Rathi, P., Dash, A., ... & Kanaka, K. K. (2023). Systematic analysis of *Ocimum sanctum* revealed key genes and pathways related to various molecular processes and pathways. *The Pharma Innovation Journal*.
2. Nidhi Sukhija, Kanaka K. K., Anoop Anand Malik. (2023). Calf rearing. *Doodh Ganga*.
3. Nidhi Sukhija, Kanaka, K. K., and Vidhyasagar. (2023). Livestock products importation guidelines in India. *GreenariA Magazine*.
4. Nidhi Sukhija, Kanaka K. K., Aishwarya Dash., Pravin Purohit. (2022). Biosecurity protocol towards FMD-freedom. *Indian Dairyman*.
5. Kanaka K. K., Nidhi Sukhija, P B Purohit, C K Prasad, Somagond A. (2022). Role of sheep husbandry in economic upliftment of farmers in India. *Pashudhan Praharee*.
6. Kanaka K. K., Nidhi Sukhija, Vidhyasagar, Chethan Raj. (2022). A Case study on native Cattle and Buffalo production systems in rural part of Chitradurga district of Karnataka. *Pashudhan Praharee*.
7. Nidhi Sukhija, Kanaka K. K., Vidhyasagar, Chethan Raj. (2022). Impact of Covid-19 on Research, Growth and Development of Molecular Cytogenetics in Domestic Animal Studies. *Pashudhan Praharee*.
8. Kumar, H., Chaudhary, A., Singh, A., Sukhija, N., Panwar, A., Saravanan, K., ... & Panigrahi, M. (2020). A review on epigenetics: Manifestations, modifications, methods & challenges. *Journal of Entomology and Zoology studies*, 8(4), 01-06.
9. Komal, N., Sukhija, N., George, L., Alex, R., & Verma, A. (2023). Impact of non-genetic factors on clinical mastitis incidence in Murrah buffaloes. *The Pharma Innovation Journal*, 12(5), 4003-4007.

10. Jaglan, K., Sukhija, N., Kk, K., Verma, A., & Surati, U. (2023). Chi square analysis of parity, period of calving, season of calving and lactation yield influencing mastitis incidence in *Bubalus bubalis*. *The Pharma Innovation Journal*.
11. Dash, A., Devi, M. K., Jena, B. R., Sukhija, N., Kanaka, K. K., Purohit, P., ... & Kumar, S. (2022). Estimation of body condition score to measure energy reserve in cattle. *Pharma Innov. J*, 1603-1607.
12. Kanaka K. K. and Nidhi Sukhija (2023). Worth of some lesser-known small-sized cattle and buffalo breeds. *Greenaria Magazine*, 2(2).
13. Kanaka K. K. and Nidhi Sukhija. (2023) Dialogue on Bovine Breeding and Policy-making in Indian Context. *Indian Dairyman*.

Workshops and trainings:

1. Workshop cum training on Metabolomics: Basic principles and Applications organized by ICAR-NDRI, Karnal from March 03-05, 2020.
2. Training-cum-workshop on Computer Vision Applications in Dairying organized by ICAR-NDRI, Karnal under NAHEP from January 22-24, 2020.
3. Workshop on Mammalian Genome Editing by CRISPR Technique organized by NDRI, Karnal under NAHEP on November 15, 2019.
4. Lab Animals in Bio-Medical Research organized by Department of Animal Genetics and Breeding, College of Veterinary and Animal Sciences, MAFSU, Parbhani, 2021.
5. Statistical techniques for data analysis in research work organized by Department of Animal Genetics and Breeding, College of Veterinary and Animal Sciences, MAFSU, Parbhani, 2023.

I solemnly declare that the details mentioned above are strictly true to the best of my knowledge.

(last updated on 16th April 2024)