		Brief Biodata	
Name	:	Dr. Anjali	
Designation	:	Scientist	
Discipline	:	Animal Physiology	
Email	:	anjali1@icar.gov.in	
Mobile	:	7389024610	

<b>Education Qualification</b>				
Degree	Subject	Institute		
B.V.Sc & A.H.	Veterinary science and Animal husbandry	Chhattisgarh Kamdhenu University, College of veterinary science and animal husbandry, Anjora, Durg		
M.V.Sc	Veterinary Physiology	Deemed university, ICAR- IVRI, Izatnagar		
PhD	Veterinary Physiology	Deemed university, ICAR- IVRI, Izatnagar		

## **Area of Research**

Dr. Anjali has previously worked in stress physiology, gene editing, and in vitro fertilization (IVF), contributing significantly to these areas. Her research has focused on understanding thermoadaptibility in indigenous cattle breeds under heat stress, thyroid hormone dynamics, and gene expression patterns linked to resilience. She has also successfully applied CRISPR-Cas9 technology for gene editing, including GDF9 gene knockout studies, and advanced IVF techniques for reproductive enhancement. Moving forward, Dr. Anjali plans to focus primarily on gene editing, leveraging her expertise to address challenges in livestock adaptation and productivity, particularly through projects like enhancing thermotolerance in Frieswal cattle via HSP40 gene modulation.

## Fellowships/Awards etc.

- Pt. Teerath Prasad Mishra Memorial Gold Medal in B.V.Sc & A.H Programme
- Smt. Kamala Mandal Memorial Young Scientist Award

## **Selected Publications:**

- Anjali, G.V., Sarma, L., Kittur, P.M., Kumar, A., Punetha, M., Pathak, M.C., Verma, V., Samad, H.A., Maurya, V.P., Chouhan, V.S. and Singh, G., 2023. Comparative assessment of thermoadaptibility between Tharparkar and Sahiwal based on biochemical profile and gene expression pattern under heat stress. Livestock science, 270, p.105189.
- Anjali, VK, G., Sarma, L., Tripathi, M., Verma, M.R., Verma, V., Pathak, M.C., Samad, H.A., Maurya, V.P., Chouhan, V.S. and Singh, G., 2023. Thyroid hormone dynamics of Tharparkar and Sahiwal cattle during induced heat stress. Tropical Animal Health and Production, 55(1), p.57.
- Anjali, Kumar, A., Nanda, R., Samad, H.A., Maurya, V.P., Singh, G. and Chouhan, V.S., 2024.
  Transcriptional profiling of GDF9 and ITS Signaling receptors in goat granulosa and theca cells.
  Indian Journal of Small Ruminants (The), 30(1), pp.41-45.
- Tripathi, M.K., Jose, B., Khanna, S., Kumar, P., Konda, Anjali., Chauhan, V.S., Sarkar, M. and Singh, G., 2021. CRISPR mediated BMP15 gene knockout in Caprine granulosa cells. *Pharma Innov*, 10(7), pp.252-255.
- Tejaswi, V., Bosco, J., Verma, V., Anjali, Pathak, M.C., Samad, H.A., Tiwari, A.K., Chouhan, V.S., Maurya, V.P., Sarkar, M. and Singh, G., 2022. Seasonal alterations in blood biochemical parameters among zebu and crossbred cattle. Biological Rhythm Research, 53(12), pp.1941-1949.
- Kittur, P.M., Karthiga, K., Sarma, L., Gururaj, Anjali, Lata, K., Verma, V., Samad, H.A., Chouhan, V.S., Singh, G. and Maurya, V.P., 2024. Astaxanthin supplementation ameliorates simulated heat stress by regulating physio-biochemical responses in Sirohi goats. Veterinary Research Communications, pp.1-8.
- Mishra, V., Patel, P.K., Bhoomika, Anjali, Shukla, A., Sharma, A. and Patel, B., 2019. Climate change and its impacts on global health
- D. G., Kishor Kumar; M., Pashupathi; Anjali; Panigrahi, Manjit; C. L., Madhu; M., Kesavan; Singh, Thakur Uttam; Kumar, Dinesh; Parida, Subhashree. Leptin Increases Nitric Oxide Level Via Increase In INOS Expression In Early Pregnant Mouse Uterus. Exploratory Animal & Medical Research, 13(1).
- Nanda, R., Anjali, Senthamilan, S., Doneriya, G., Punetha, M., Singh, G. and Chouhan, V.S., 2021. Ovum Pick-up in Ruminants. Animal Reproduction Update, 1(1), pp.46-50.