



Dr. Jaya, B.V.Sc., M.V.Sc.
Scientist (Animal Physiology)

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Publications	Total no. of Research Paper	: 28
	Total no. of Books/Manual	: 5
	No. of patent granted (G) /filed (F)	: (G) (F) Nil
	Copyright granted (G) /filed (F)	: (G) (F) Nil
	Policy Document	: Nil
Experience with research interest:		
<p>Expertise in stress and adaptation physiology and reproductive endocrinology of animals. She has studied expression dynamics of different heat stress induced genes during heat stress acclimation in Tharparkar cattle and functional role of different growth factors in bubaline ovaries. She is currently working on molecular biology of porcine ovaries using CRISPR/Cas genome editing system. She is also trained in disaster management of livestock and emergency preparedness during flood and drought.</p>		
Top 10 Publications (in the format):		
<ol style="list-style-type: none"> 1. Devi H. L., Kumar S., Konyak Y. Y., Bharati Jaya., Bhimte A., Pandey Y., ... & Verma M. R. (2020). Expression and functional role of fibroblast growth factors (FGF) in placenta during different stages of pregnancy in water buffalo (<i>Bubalus bubalis</i>). <i>Theriogenology</i>, <i>143</i>, 98-112. 2. Paul A., Bharati Jaya., Punetha M., Kumar S., Malleesh V. G., Chouhan V. S., ... & Singh G. (2019). Transcriptional regulation of thrombospondins and its functional validation through CRISPR/Cas9 mediated gene editing in corpus luteum of water buffalo (<i>Bubalus Bubalis</i>). <i>Cell physiol biochem: international journal of experimental cellular physiology, biochemistry, and pharmacology</i>, <i>52</i>(3), 532-52. 3. Kumar S., Kumar S., Singh R. V., Chauhan A., Kumar A., Bharati Jaya., & Singh S. V. (2019). Association of Bovine CLEC7A gene polymorphism with host susceptibility to paratuberculosis disease in Indian cattle. <i>Research in veterinary science</i>, <i>123</i>, 216-222. 4. Kumar S., Kumar S., Singh R. V., Chauhan A., Kumar A., Bharati Jaya., Sulabh S., ... & Singh S. V. (2019). Genetic association of polymorphisms in bovine TLR2 and TLR4 genes with Mycobacterium avium subspecies paratuberculosis infection in Indian cattle population. <i>Veterinary research communications</i>, <i>43</i>(2), 105-114. 5. Bharati Jaya., Dangi S. S., Chouhan V. S., Mishra S. R., Bharti M. K., Verma V., ... & Bag S. (2017). Expression dynamics of HSP70 during chronic heat stress in Tharparkar cattle. <i>International journal of biometeorology</i>, <i>61</i>(6), 1017-1027. 6. Bharati Jaya., Dangi S. S., Bag S., Maurya V. P., Singh G., Kumar P., & Sarkar M. (2017). Expression dynamics of HSP90 and nitric oxide synthase (NOS) isoforms during heat stress acclimation in Tharparkar cattle. <i>International journal of biometeorology</i>, <i>61</i>(8), 1461-1469. 		

7. **Bharati Jaya.**, Dangi S. S., Mishra S. R., Chouhan V. S., Verma V., Shankar O., ... & Singh G. (2017). Expression analysis of toll like receptors and interleukins in Tharparkar cattle during acclimation to heat stress exposure. *Journal of Thermal Biology*, 65, 48-56.
8. Thakur N., Singh G., Paul A., **Bharati Jaya.**, Rajesh G., Vidyalakshmi G. M., ... & Sarkar M. (2017). Expression and molecular cloning of interferon stimulated genes in buffalo (*Bubalus bubalis*). *Theriogenology*, 100, 50-58.
9. Rajesh G., Paul A., Mishra S. R., **Bharati Jaya.**, Thakur N., Mondal T., ... & Bag S. (2017). Expression and functional role of Bone Morphogenetic Proteins (BMPs) in cyclical corpus luteum in buffalo (*Bubalus bubalis*). *General and comparative endocrinology*, 240, 198-213.
10. Mishra S. R., **Bharati Jaya.**, Rajesh G., Chauhan V. S., Sharma G. T., Bag S., ... & Sarkar M. (2017). Fibroblast growth factor 2 (FGF2) and vascular endothelial growth factor A (VEGFA) synergistically promote steroidogenesis and survival of cultured buffalo granulosa cells. *Animal reproduction science*, 179, 88-97.

Technologies developed

Nil

Awards

1. Best Student Award of IVRI (Bronze Category) 2013-15 M.V.Sc. Batch
2. Young Scientist Award (2016) by Society of Animal Physiologists of India (SAPI)
3. Best M.V.Sc Thesis Award (2016) by Society of Animal Physiology of India (SAPI)
4. ICMR-JRF in Life Sciences (2015) for PhD Research
5. CSIR-UGC JRF-NET in Life Sciences (2015)
6. ICAR-NET (2015) in Animal Physiology
7. ICAR-AICE -SRF (2015) 1st Rank in Animal Physiology
8. CSIR-UGC NET (2014) in Life Sciences
9. UGC-NET (2014) in Social Medicine and Community Health
10. ICAR-JRF for M.V.Sc. (2013)
11. Neomec Project Siksha Scholarship (2012) at University level for B.V.Sc & A.H.

Membership of professional society:

- Indian Science Congress Association
- Society of Animal Physiologists of India
- Animal Physiologists Association