

Brief Biodata

Name	:	Dr. Sumit Mahajan	
Designation	:	Scientist (SS)	
Discipline	:	Veterinary Medicine	
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★ **Education qualification** *(Graduation on wards)*

Degree	Subject (s)	Institute
Ph.D.	Veterinary Medicine	IVRI, Izatnagar (UP)
MVSc	Veterinary Epidemiology & Preventive Medicine	SKUAST-Jammu(J&K)
BVSc.	As per VCI	JNKVV-Jabalpur (MP)

❖ **Area of research**

- Internal Veterinary Medicine and Natural Product Research and Phototherapies
- Metabolic and Production disease of dairy animals
- Bull fertility and semen cryobiology

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

1.	Best Ph. D thesis research award of Indian Society for Veterinary Medicine 2014
2.	Best research paper award of Indian Society for Veterinary Medicine 2012
3.	Inspire DST fellowship for first ranker for pursuing Ph. D from 2011 to 2014
4.	Certificate of merit for degree MVSc for achieving prescribed scholastic standard of high order of University (2010)
5.	University merit scholarship for perusing MVSc from 2008 to 2010

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

1.	George, D., Kumar, A., Kumar, S., Saxena, H., Singh, P., Kumar, P., Mahajan, S. , Kumar, R., Gupta, P.K., Handa, M. and Shukla, R., 2026. Functionalized iron oxide nanoparticles improve iron status and alleviate iron deficiency anemia: Evidence from a comparative In vivo study. Inorganic and Nano-Metal Chemistry, 56(2), pp.126-144.
2.	Mahajan, S. , Pande, M., Chand, N., Anjali, Sirohi, A.S., Kumar, S., Saha, S., Kumar, A., Mohanty, A.K. and Mitra, A., 2025. Oxidative stress, serum metabolites, inflammatory cytokine changes associated with lumpy skin disease in cattle. BMC Veterinary Research, 21(1), p.696
3.	Singh, A., Thakur, V., Sarkar, T.K., Rawat, S., Jithin, M.V., Roy, D., Verma, A.K., Varun, V.K., Sirohi, A.V.S., Chand, N., Kumar, S. and Mahajan, S. , 2025. Hematological and serum biochemical profile of Sahiwal dairy cow during transitional period. Agricultural Mechanization in Asia, Africa

	and Latin America (AMA), 56(8), pp. 21125
4.	Kumar, S., Pande, M., Saha, S., Chand, N., Prasad, N., Arya, S., Mahajan, S. , Singh, U., Dubey, S.K. and Mohanty, A.K., 2025. Augmented-OvSynch enhances estrus resumption, luteal function, and conception rates in postpartum Zebu crossbred cows under tropical smallholder systems. <i>Veterinary World</i> , 18(12).
5.	Pande, M., Ghosh, S. K., Tyagi, S., Katiyar, R., Kumar, S., Srivastava, N., Sirohi, A.S., Sarika, Chand, N., Dhara, S.K. and Bhure, S.K and Mahajan, S. (2024). Novel Antioxidant Humanin Analogue Restores Bull Semen Cryosurvivability. <i>Andrologia</i> , 2024(1), 5582359.
6.	Pande, M., Tyagi, S., Kumar, S., Soni, Y.K., Chand, N., Sirohi, A.S., Sarika, Devi, I. and Mahajan, S. 2022. Effects of unconjugated gold, silver and titanium dioxide nanoparticles on bovine spermatozoa at various stages of cryopreservation. <i>Cryo Letters</i> 43(3): 150-157
7	Chand, N., Pande, M., Tyagi, S., Sirohi, A.S., Mahajan, S. Kumar, S. Sarika and Sharma, A. 2022. Antibioqram of microorganisms isolated from fresh and frozen semen of crossbred Frieswal bulls. <i>Cryo Letters</i> (43(6) 322-327
8	Yangzom, P., Amruthanand, S., Sharma, M., Mahajan, S. , Madhu Cholenahalli Lingaraju, M.C., Parida, S., Sahoo, M Kumar, D and Singh, T.U. 2022. Subacute 28 days oral toxicity study of kaempferol and biochanin-A in the mouse model. <i>Journal of Biochemical and Molecular Toxicology</i> . 2022;e23090 1-11.
9	Mahajan, S. , Dey, S., Kumar, A. and Panigrahi, P. N. 2018. Nitrosative stress indices in dogs with neurological form of canine distemper. <i>Iranian Journal of Veterinary Research</i> 19(3) 229-232
10	Panigrahi, P.N., Dey, S., Sahoo, M., Choudhary, S.S. and Mahajan, S. 2016. Alteration in Oxidative/nitrosative imbalance, histochemical expression of osteopontin and antiurolithiatic efficacy of <i>Xanthium strumarium</i> (L.) in ethylene glycol induced urolithiasis. <i>Biomedicine and Pharmacotherapy</i> 84 :1524–1532.
11	Mahajan, S. , Panigrahi, P.N., Dey, S., Dan A., Kumar, A., Mahendran, K and Maurya, P.S. 2017. Circulating oxidative stress caused by <i>Psoroptes natalensis</i> infestation in Indian water buffaloes. <i>Journal of Parasitic Diseases</i> . 41(3) :689–692 DOI 10.1007/s12639-016-0868-0.
12	Panigrahi, P.N., Mahendran, K., Jena, S.C., Behera, P., Mahajan, S. , Arjun, K. and Dey, S. 2016. Trypanosoma evansi infection in a German shepherd dog — Apparent successful treatment using serial low dose of diminazene aceturate. <i>Veterinary Parasitology: Regional Studies and Reports</i> 1-2: 70–74.
13	Kumar, A., Dey, S., Mahendran, K, Dan, A., Mahajan, S. and Saxena, A. 2014. Comparative assessment of N-terminal pro-B-type natriuretic peptide, nitric oxide and echocardiography for diagnosis of dilated cardiomyopathy in dogs. <i>Iranian Journal of Veterinary Research</i> , 15, (3), 48: 233-237
14	Kumar, A., Dey, S. and Mahajan, S. 2014. Incidence and Risk Assessment of Cardiac Arrhythmias in Dogs with Respect to Age, Breed, Sex and Associated Biochemical Changes. <i>Advances in Animal and Veterinary Sciences</i> . 2 (5): 277 – 28.
15	Mahajan, S. , Agrawal, R., Kumar, M., Mohan, A and Pande, N (2014). Comparative evaluation of different F and N gene based reverse transcription polymerase chain reaction for molecular detection of Peste des petits ruminants virus from clinical samples. <i>Veterinarski Arhiv</i> , 84(5): 485-492.
16	Mahajan, S. , Agrawal, R., Kumar, M., Mohan, A and Pande, N. 2013. Comparative evaluation of RT-PCR with sandwich-ELISA for detection of Peste des petits ruminant in sheep and goats.

	<i>Veterinary World</i> 6(6):288-290.
17	Mahajan, S., Agrawal, R., Kumar, M., Mohan, A and Pande, N. 2013. Incidence of Peste des petits ruminants in nomadic sheep and goat of Jammu region, <i>Veterinary world</i> , 6(7):384-387,
18	Mahajan, S., Agrawal, R., Kumar, M., Mohan, A and Pande, N. (2012). Risk of seroconversion to Peste des petits ruminants (PPR) and its association with species, sex, age and migration. <i>Small Ruminant Research</i> , 104: 195-200.
19	Mahajan, S., Agrawal, R., Kumar, M., Mohan, A and Pande, N. (2012). Sandwich ELISA based evaluation of clinical samples for Peste des petits ruminants (PPR) virus detection. <i>Small Ruminant Research</i> , 106: 206-209.
20	Mahajan, S., Agrawal, R and Pande, N. (2011). A comparative evaluation of different diagnostic tests for brucellosis in buffaloes. <i>Buffalo Bulletin</i> , 30: 75-78.
❖ On-going research projects	
	• Evaluation of herbo-mineral supplementation for amelioration of immune-metabolic and oxidative stress in transitional cow as PI • DST SUTRA-PIC project: Utilization of paddy straw as complete fodder block by treating with Gomutra (Indigenous cow urine) as Co-PI • AICRP on Cattle sub project Genetic studies on the performance of important indigenous breeds and their improvement through selection (IBP) as Co-PI