Dr Monalisa Sahoo PhD (Veterinary Pathology) Scientist (SS) Email: vety.lisa @gmail.com, monalisa.sahoo@icar.gov.in

Current Research area

Exploring the pathology and pathogenesis of FMDV

Total Research Papers: 45

Top Twenty Research Papers:

1. Sahoo, M., Baloni, S., Thakor, J.C., Dinesh, M., Bhutediya, J., Qureshi, S., Dhama, K., Dubal, Z.B., Singh, K. and Singh, R., 2020. Localization of *Pasteurella multocida* antigens in the brains of pigs naturally infected with Pasteurellosis revealing a newer aspect of pathogenesis. Microbial pathogenesis, 140, p.103968.

2. Sahoo, M., Dinesh, M., Thakor, J.C., Baloni, S., Saxena, S., Shrivastava, S., Dhama, K., Singh, K. and Singh, R., 2020. Neuropathology mediated through caspase dependent extrinsic pathway in goat kids naturally infected with PPRV. *Microbial Pathogenesis*, 140, p.103949

3. Varshney, Rajat, Ritu Varshney, Vinod Kumar Chaturvedi, Mayank Rawat, M. Saminathan, Vidya Singh, Rahul Singh, Monalisa Sahoo, and Praveen Kumar Gupta. "Development of novel iron-regulated *Pasteurella multocida* B: 2 bacterin and refinement of vaccine quality in terms of minimum variation in particle size and distribution vis-a-vis critical level of iron in media." Microbial Pathogenesis 147 (2020): 104375

4. Srinivasan, G., Parida, S., Pavithra, S., Panigrahi, M., Sahoo, M., Singh, T.U., Madhu, C.L., Manickam, K., Shyamkumar, T.S., Kumar, D. and Mishra, S.K. 2020. Leptin receptor stimulation in late pregnant mouse uterine tissue inhibits spontaneous contractions by increasing NO and cGMP. Cytokine, 137, p.155341

5.Dinesh, M., Jigar Thakor, K. V. Vishwa, Mamta Pathak, Sailesh Patel, G. Saikumar, Pradeep Kumar, Monalisa Sahoo. "Meningoencephalitis and septicemia in a 4-week-old piglet due to dual streptococcal infections." (2020): 114-118.

6. Thakor, J.C., Kumar, P., Dinesh, M., Vishwa, K.V., Qureshi, S., Singh, K.P. and Sahoo, M., 2020. Sequential development of pathology and pathogenesis of capsular serotype D of Pasteurella multocida of porcine origin in mouse model. Indian J. Vet. Pathol., 44(2) : 69-80.

7. Swapana, C.R., Aswathy Gopinathan, Kiranjeet Singh, Sasikala, R., Akshay Kumar, Sowbharenya Chelladuraai, Naveen Kumar, Monalisa Sahoo and Ravi Kant Agrawal. Down-Regulation of Rho GTPase-Activating Protein 7 (DLC1) in Tear Film and Modulation of Rho GTPase Dynamics by Rosuvastatin in Dogs Suffering from Keratoconjunctivitis Sicca. Journal of Animal Research. v.10 n.6, p. 01-10.

8. Thakor, J., Dinesh, M., Baloni, S., Bhutediya, J., Qureshi, S., Singh, K.P. and Sahoo, M., 2019. Role of apoptosis in the pathology of pneumonic Pasteurellosis in naturally infected pigs. Indian Journal of Veterinary Pathology, 43(1), pp.56-60.

9. Kashyap, G., Singh, R., Malik, Y.S., Agrawal, R.K., Singh, K.P., Kumar, P., Sahoo, M., Gupta, D. and Singh, R., 2018. Experimental bovine rotavirus-A (RV-A) infection causes intestinal and extraintestinal pathology in suckling mice. Microbial pathogenesis, 121, pp.22-26

10. Hussain, S., Saxena, S., Shrivastava, S., Arora, R., Singh, R.J., Jena, S.C., Kumar, N., Sharma, A.K., Sahoo, M., Tiwari, A.K. and Mishra, B.P., 2018. Multiplexed Autoantibody Signature for Serological Detection of Canine Mammary Tumours. Scientific reports, 8(1), p.15785

11. Shahi, N., Mallik, S.K., Sahoo, M., Chandra, S. and Singh, A.K., 2018. First report on characterization and pathogenicity study of emerging Lactococcus garvieae infection in farmed

rainbow trout, Oncorhynchus mykiss (Walbaum), from India. Transboundary and emerging diseases, 65(4), pp.1039-1048

12. Rungsung, S., Singh, T.U., Rabha, D.J., Kumar, T., Lingaraju, M.C., Parida, S., Paul, A., Sahoo, M. and Kumar, D., 2018. Luteolin attenuates acute lung injury in experimental mouse model of sepsis. Cytokine, 110, P-333-343.

13. Rabha, D.J., Singh, T.U., Rungsung, S., Kumar, T., Parida, S., Lingaraju, M.C., Paul, A., Sahoo, M. and Kumar, D., 2018. Kaempferol attenuates acute lung injury in caecal ligation and puncture model of sepsis in mice. Experimental lung research, pp.1-16.

14. Arora, Richa, Sonal Saxena, Sameer Shrivastava, Piyush Kumar Singh, Shahid Hussain, Manoj Kumar, Subas Chandra Jena and Monalisa Sahoo ."Genetic characterization and phylogenetic analysis of triose phosphate isomerase (TPI) gene amplified from a case of canine mammary tumour showing TPI over-expression and high titre anti-TPI antibodies." Indian Journal of Animal Sciences, 88, no. 9 (2018): 1047-1050.

15. Shahi, N., Singh, A.K., Sahoo, M., Mallik, S.K. and Thakuria, D., 2017. Molecular cloning, characterization and expression profile of kisspeptin1 and kisspeptin1 receptor at brain-pituitary-gonad (BPG) axis of golden mahseer, Tor putitora (Hamilton, 1822) during gonadal development. Comparative Biochemistry and Physiology Part B: Biochemistry and Molecular Biology, 205, pp.13-29.

16. Panigrahi, P.N., Dey, S., Sahoo, M. and Dan, A., 2017. Antiurolithiatic and antioxidant efficacy of Musa paradisiaca pseudostem on ethylene glycol-induced nephrolithiasis in rat. Indian Journal of Pharmacology, 49(1), p.77.

17. 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 Xanthium strumarium (L.) in ethylene glycol induced urolithiasis. Biomedicine & Pharmacotherapy, 84, pp.1524-1532

18. Sahoo, N.R., Nesa, N., Naskar, S., Banik, S., Pankaj, P.K. and Sahoo, M. 2016. Microsatellite and mitochondrial diversity analysis of native pigs of Indo-Burma biodiversity hotspot. Anim. Biotech., 27(1): 52-59.

19. Shahi, Neetu, Sahoo, M., Malik, S.K., Sharma , D. and Das, Partha. 2012. The microcystinsinduced DNA damage in the liver and the heart of zebrafish, Danio rerio. Toxicological and environmental chemistry. 94 (2): 340-49.

20. De, U.K., Dey, S., Banerjee, P. S. and Sahoo, M. 2011. Correlations among Anaplasma marginale parasitemia and markers of oxidative stress in crossbred calves. Tropical Animal Health and Production. 44(3): 385-388

Awards/Honours

- 1. Bagged Best Ph.D. Thesis Award for the PhD Thesis entitled "**Spontaneous brain** affections in pigs and pathogenesis of *Streptococcus suis* induced meningoencephalitis in mouse model" during the Asian veterinary Pathology Conference held at Veterinary College, Bengaluru from 9-11th Nov. 2017.
- 2. Bagged ASVP President's Poster Award during the technical session PDMP8-25 on "Neuropathology due to apoptosis caused by PPRV in naturally affected goats" in the XXXIV Annual Conference of Indian Association of Veterinary Pathologists, VIII Biennial meeting of the Asian Society of Veterinary Pathologists and International Conference on" Emerging Horizons in Diagnosis of Animal and poultry diseases- Towards sustainable production in Asian countries" during 9-11 November,2017 organised by Dept. of Veterinary Pathology, Veterinary College, Hebbal, Bengaluru, India.
- 3. Received Organizing Secretary's second best poster presentation award on the topic "Evidence of Neurovirulence of FMDV serotype-A in crossbred calves" during Annual Conference held at Chhatisgarh kamdhenu Vishwavidhyalaya, Durg between 9-11 Nov, 2016

- 4. IAVP- Dr B.S. Rajya Award (Best Non Oncology Short Communication), 2019 for "Role of apoptosis in the pathology of pneumonic Pasteurellosis in naturally infected pigs; Indian Journal of Veterinary Pathology, 431(1):56-60.
- 5. IAVP-Dr B.S, Rajya Memorial Award 2018 as collaborative entitled "A case of hepato-renal syndrome associated with Paratuberculosis in goat" during the Veterinary Pathology Congress, 2019 held at College of Veterinary Sciences & animal Husbandry, central Agricultural University, Selesih, Aizwal, Mizoram.
- 6. Received IMSA JMS Best paper Award 2018 as collaborative published in Journal of Meat Science (Vol 13, Issue 1, page 64-72).
- 7. Received Excellence Award as Reviewer of Indian Journal of Animal Research (ARCC Journal) in 2020.
- 8. Received the "Best presentation by Participants" award in winter school programme organized by ICAR-Central Institute of Freshwater Aquaculture, Kausalyaganga, Bhubaneswar, Odisha during 26 November to 16 December, 2019.
- 9. Received Third prize based on evaluation in the Winter school programme organized by ICAR-Central Institute of Freshwater Aquaculture, Kausalyaganga, Bhubaneswar, Odisha during 26 November to 16 December, 2019.
- Received First prize for the best case report entitled "Pathological and molecular diagnosis of rare case of fibrinous pericarditis in piglets organized by Div. of Pathology on 56th Establishment Day in 2019

<u>Manuals</u>

- Developed teaching manual on "Color Atlas on Foot-and-Mouth Disease in cattle calves" by Dr R. singh, Dr A.K. Sharma, Dr G. Saikumar, Dr K. Dhama, Dr Monalisa Sahoo, Dr Vidya Singh, Dr Pawan Kumar, Dr Palanivelu M, Dr Asok Kumar, Dr Saminathan M, Dr Tareni Das, Dr Karikalan M, Dr Abhishek Chandra Saxena and Dr Mahendran K. 2016. Published by ICAR-IVRI, Izatnagar.
- Developed one color atlas "Colour Atlas of Veterinary Pathology Museum Specimens" by Monalisa Sahoo, R. Barathidasan and R. Somvanshi, a guide for post graduate students, undergraduates, assistant professors as well as field veterinarians for the better diagnosis of the disease

Membership in Scientific Societies

- 1. Odisha state Veterinary Council (OVC).
- 2. Indian Association of Veterinary Pathologist (IAVP)
- 3. Life member of Dr. C.M. Singh Endowment Trust
- 4. Life Member of ISSAR