DR. SURESH KUMAR
Scientist Grade-II
In Vivo Bioassay Laboratory & Animal Facility
National Institute of Biologicals
Ministry of Health & Family Welfare, Government of India
A- 32, Sector- 62 (Institutional Area), Noida- 201309 (UP)- INDIA
E-mail: drsureshkumarmohil@gmail.com ;
suresh.kumar@nib.gov.in
Year of Joining: January 2015

PROFESSIONAL SUMMORY: Dr. Kumar is currently serving as a Scientist Grade-II at the National Institute of Biologicals, Ministry of Health & Family Welfare, Government of India, Uttar Pradesh. He has around 20 years of research experience in highly prestigious institutions, including the National Brain Research Centre**,** University of Delhi**,** and the National Institute of Biologicals**.** He is a highly skilled professional with specialized expertise in the quality control of biologicals, particularly therapeutics and vaccines, with a strong focus on *in vivo* models. Dr. Kumar possesses comprehensive hands-on experience in laboratory animal science, including CCSEA-compliant animal facility management**,** biosafety practices**,** and biomedical waste management. Dr. Kumar is a recognized expert in epidemiological studies**,** neurobehavioral science, and has key research expertise in the gut microbiota and metabolic syndromes

EDUCATION: M. V. Sc. (Veterinary Epidemiology and Preventive Medicine)
Ph. D (Microbiology)

MAJOR PUBLICATIONS

1. **Kumar, S.,** Himanshu, Gaur, P., Ahmad, S., Puri, P., Raj, V. S., & Pandey, R. P. (2026). Microbiota Transplantation as a Future Novel Therapeutic Strategy Approach. *Diseases*, *14*(2), 42. https://doi.org/10.3390/diseases14020042
2. **Kumar, S**., Mukherjee, R., Gaur, P., Leal, É., Lyu, X., Ahmad, S., Puri, P., Chang, C.-M., Raj, V. S., & Pandey, R. P. (2025). Unveiling roles of beneficial gut bacteria and optimal diets for health. *Frontiers in Microbiology*, *16*, 1527755. https://doi.org/10.3389/fmicb.2025.1527755
3. **Kumar, S**., Deeba, F., Sharma, P., Kumar, L., Kumari, R., Chaudhary, M., Yadav, S., Pal, A., Chander, H., Anvikar, A., & Yadav, S. (2024). Analysis of historical data to accelerate deletion of abnormal toxicity test requirement for biologicals and vaccines. *Toxicology Reports*, *11*, 101815. https://doi.org/10.1016/j.toxrep.2024.101815
4. **Kumar, S**., & Atul, P. K. (2024). Animal models for gut microbiome research. In H. Vijayakumar Sreelatha, S. Patel, & P. Nagarajan (Eds.), *Animal models in research*. Springer, Singapore. https://doi.org/10.1007/978-981-97-0048-6_10
5. **Kumar, S**., Raj, V. S., & Pandey, R. P. (2024). ImmuneCONNECT. *The Official Newsletter of the Indian Immunology Society (IIS)*, Issue II, October, 2024.
6. Yadav, S., Kumari, B., Thakur, N., **Kumar, S**., & Bharti, V. K. (2023). Livestock meat and fish: Presence of potential adulterants, contaminants and their detection. In *Handbook on food adulterants and contaminants: Detection, chemistry and health hazards* (Chap. 17). New India Publishing Agency.
7. **Kumar, S**., Perumal, N., Yadav, P. K., Pandey, R. P., Chang, C.-M., & Raj, V. S. (2022). Amoxicillin impact on pathophysiology induced by short-term high-salt diet in mice. *Scientific Reports*, *12*(1), 19351. https://doi.org/10.1038/s41598-022-21270-9
8. **Kumar, S**., Raj, V. S., Ahmad, A., & Saini, V. (2022). Amoxicillin modulates gut microbiota to improve short-term high-fat diet-induced pathophysiology in mice. *Gut Pathogens*, *14*(1), 40. https://doi.org/10.1186/s13099-022-00513-0
9. **Kumar, S**., Mukherjee, R., Aroura, S., Raj, V. S., Pandey, R. P., & Chang, C.-M. (2022). 3R initiatives for advanced biological safety tests. *BAOJ Microbiology*, *6*(1), 1003.

10. **Kumar, S**., Dhiman, R., Prudencio, C. R., et al. (2023). Chitosan: Applications in drug delivery system. *Mini Reviews in Medicinal Chemistry, 23*(2), 187–191. https://doi.org/10.2174/1389557522666220609102010
11. **Kumar, S**., Perumal, N., & Raj, V. S. (2022). Comparative evaluation of the impact of high-fat and high-salt dietary components on humans and mice. *International Journal of Biology, Pharmacy and Allied Sciences, 11*(5), 2340–2359. https://doi.org/10.31032/IJBPAS/2022/11.5.6081
12. **Kumar, S**., & Yadav, P. K. (2021). Basic biostatistics for laboratory animal science. In P. Nagarajan, R. Gudde, & R. Srinivasan (Eds.), *Essentials of laboratory animal science: Principles and practices*. Springer, Singapore. https://doi.org/10.1007/978-981-16-0987-9_6
13. **Kumar, S**., Rajput, M. K., & Yadav, P. K. (2021). Laboratory animal nutrition. In P. Nagarajan, R. Gudde, & R. Srinivasan (Eds.), *Essentials of laboratory animal science: Principles and practices*. Springer,Singapore. https://doi.org/10.1007/978-981-16-0987-9_16
14. **Kumar, S**., Rajput, M. K., & Tickoo, S. B. (2021). Laws, regulations, policies and guidelines governing the care and use of laboratory animals. In P. Nagarajan, R. Gudde, & R. Srinivasan (Eds.), *Essentials of laboratory animal science: Principles and practices*. Springer, Singapore. https://doi.org/10.1007/978-981-16-0987-9_2
15. **Kumar, S**., Perumal, N., & Srinivasan, R. (2021). Evaluation of gut microbial changes in human and murine models in response to antibiotics. *Indian Journal of Pharmaceutical Sciences, 83*(6), 1308. https://doi.org/10.36468/pharmaceutical-sciences.887
16. **Kumar, S**., & Perumal, N. (2021). A journey of coronaviruses from sporadic outbreaks to the COVID-19 pandemic. *Coronaviruses, 2*(4), 460–467. https://doi.org/10.2174/2666796701999201116212306
17. **Kumar, S**., Yadav, P. K., Srinivasan, R., & Perumal, N. (2020). Selection of animal models for COVID-19 research. *VirusDisease, 31*(4), 453–458. https://doi.org/10.1007/s13337-020-00637-4
18. **Kumar, S**. (2018). Guidelines for designing experiments with laboratory animals for evaluation of biologicals and food products. In A. S. Yadav, A. K. Biswas, J. J. Rokade, & M. Gopi (Eds.), *Technological advances in value addition as well as production of green and safe poultry products* (pp. 299–311). ICAR-CARI.
19. **Kumar, S**., Singh, M. P., Bharti, V. K., & Pandey, R. P. (2018). Quality control of vaccines: A journey from classical approach to 3Rs. *Microbiology Current Research, 2*(3), 46–61. https://doi.org/10.4066/2591-8036.18-369
20. Verma, A. K., Leekha, A., Kumar, V., Moin, I., & **Kumar, S**. (2018). Biodistribution and in vivo efficacy of doxorubicin-loaded chitosan nanoparticles in Ehrlich ascites carcinoma-bearing BALB/c mice. *Journal of Nanomedicine & Nanotechnology, 9*(4), 1000510. https://doi.org/10.4172/2157-7439.1000510
21. **Kumar, S**., Pandey, R. P., Bharti, V. K., Sharma, N., Singh, J. B., Chanchal, A., & Ahmad, S. (2017). Evaluation of nanoparticle pyrogenicity. *European Journal of Biomedical and Pharmaceutical Sciences, 4*(3), 168–183.
22. Pandey, R. P., & **Kumar, S**. (2017). Nanomedicine and immune response. *Indian Journal of Hospital Infection, 1*(1), 25–27.
23. Pandey, R. P., Chanchal, A., Vohra, R., Islam, M. N., **Kumar, S**., Bhushan, L., Kumar, S., & Sharma, P. (2015). Immune response of biopolymeric nanoparticulate systems. *Journal of Pharmacy Research, 4*(8), 304–306.
24. Chanchal, A., Vohra, R., Elesela, S., Bhushan, L., **Kumar, S**., Ahmad, S., & Pandey, R. P. (2014). Gelatin biopolymer: A journey from micro to nano. *Journal of Pharmacy Research, 8*(10), 1387–1397.
25. **Kumar, S**., Rakha, N. K., Khurana, R., & Chander, S. (2010). Comparative efficacy of various miticidal drugs against canine scabies. *Intas Polyvet, 11*(1), 60–64.
26. **Kumar, S**., Khurana, R., Rakha, N. K., & Khokhar, R. S. (2006). Epidemiological pattern of various skin disorders in dogs. *Indian Journal of Veterinary Research, 15*(1), 1–14.