# *Curriculum Vitae*

## 1. PERSONAL PROFILE


**Name:** **Dr. Aisha Khatoon**

**Positions:** **Assistant Professor**, Department of Pathology Faculty of Veterinary Science University of Agriculture Faisalabad
**Additional Director Academics & TRC**
**Deputy Hall Warden** (Female)
**Associate Editor (Pakistan Veterinary Journal)**

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**H-Index:** **22**

**Citations:** **1367**


## BRIEF SUMMARY OF INTEREST/ ONGOING RESEARCH

My research is primarily focused on the pathology and control of mycotoxins in poultry, using innovative strategies such as microorganisms, phytochemicals, clays, nanoparticles, and nanocomposites. I also lead work on necrotic enteritis and gut health challenges, including E. coli infections in broilers, with a focus on sustainable, non-antibiotic interventions. These efforts directly contribute to One Health goals by promoting food safety, reducing reliance on antimicrobials, and mitigating the risk of antimicrobial resistance (AMR). Additionally, my research program includes studies on emerging livestock diseases, such as Bovine Ephemeral Fever, to strengthen disease surveillance and animal health within the One Health framework.

**Research Publications:** **77** **Book chapters:** **15**
**Manuals:** **1** **Editor of proceedings:** **03**
**Abstracts published:** **102** **Popular articles:** **52**

## PROJECTS

| S.No | Project title | Status as PI or Co-PI | Funding Agency | Budget | Duration |
|---|---|---|---|---|---|
| 1 | Development and evaluation of chitosan-based nanocomposites for the control of aflatoxicosis in poultry | PI | EFS | 2.861 | 2022-2025 |

| S. No. | Project title and duration (from-to) | Status as PI or Co-PI | Funding Agency | Budget | Status |
|---|---|---|---|---|---|
| 1. | Goat Breeding for Reducing Poverty and strengthening the Role of Women in Rural Areas | Co-PI | TIKA Turkish International Cooperation and Development Agency | 0.459 Million USD | Completed (2012-2017) |
| 2. | Evaluation of Micro-organisms, Clays and Herbs for Mycotoxin degradation and Their Effect upon Nutrient Availability in Chicken | Team Member | ALP (Agricultural linkages program) | 7.081 Millions | Completed |

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| 4. | Pathobiology and molecular epidemiology of chicken infectious anemia and infectious bronchitis (IB) in commercial poultry and immunopathogenesis of IB variants | Team Scientist | PARC-ALP | 4.9115 Million PKR | Completed |
| 5. | Treatment of Mastitis by Nanoparticles and Egg Yolk Antibodies | Co-PI | PSF | 3.3 Millions PKR | Completed |

## SELECTED PUBLICATIONS

1. Ijaz, M. U., Mustafa, G., Salar, M. Z., Aqib, A. I., Hussain, G., Khatoon, A., & Hamdi, H. 2027. Prunin attenuates aflatoxin B1-induced testicular toxicity by alleviating oxidative stress and modulating TLR4/MyD88/NF-κB and Bax/Bcl-2/Caspase-3 signaling pathways. *Tissue and Cell*, 104()103830. https://doi.org/10.1016/j.tice.2026.103830 (IF: 3.1)
2. Faiz, S., Khatoon, A., Rizvi, F., & Saqib, M. 2026. First molecular evidence of bovine ephemeral fever virus in Sindh, Pakistan: phylogenetic insights and risk factor correlation. Veterinary Research Forum. 17 (7): 461 – 470. http://doi.10.30466/vrf.2025.2066094.4842 **(IF: 1.10)**
3. Rafi, U., Nawaz, Q., Latif, M. A., & Khatoon, A. (2026). LiteFeatNet: A parameter-efficient and performance-centric deep learning model for multi-ocular disease identification using intermediate feature reduction from fundus images. *Plos one*, *21*(5), e0347867. https://doi.org/10.1371/journal.pone.0347867 **(IF:2.8)**
4. Ali, A., Afzal, W., Khatoon, A., Ullah, M., Akbar, K., Zafar, M., & Noor, I. (2026). Coordinated Roles of T Cells and Natural Killer Cells in Tumor Immunity. *Current Cancer Drug Targets*. https://doi.org/10.2174/0115680096454137260622045925 **(IF: 2.5)**
5. Younas, K., Ali, A., **Khatoon, A.,** Ullah, M., Akbar, K. and Noor, I., 2026. Tumor-embedded Immunity and TRM Cell Functions in Cancer. Mini-Reviews in Medicinal Chemistry, https://doi.org/10.2174/0113895575412480251114071338 **(IF: 4)**
6. Gul, S.T., Bilal, M., Mehreen, A., **Khatoon, A.**, Maqbool, B., Sarwar, N., Arshad, M.I. and Khan, A., 2026. Role of Inflammatory Markers in Pathogenesis of Animal Brucellosis and Their Potential to be used as Diagnostic Tool. Advancements in Life Sciences, 13(1), p.3515 https://doi.org/10.62940/als.v13i1.3515
7. Raza QS, Saleemi MK, **Khatoon A,** Abbas RZ. 2025. Toxico-pathological investigations of in-ovo inoculation of different fungal extracts and Bacillus cereus alone and in combination in chicken embryos. Journal of Advanced Veterinary and Animal Research, 12(4):1370–1378. http://doi.org/10.5455/javar.2025.l997 **(IF: 1.5)**
8. Sajjal S, MM Mubashar, HA Bilal, A Zahra, A Saeed, A Khan, **A Khatoon**, MI Arshad. 2025. Assessment of Protective Role of Different Probiotic Strains against Bacterial and Endotoxin-Induced Sepsis in a Mouse Model. Probiotics and Antimicrobial Proteins. https://doi.org/10.1007/s12602-025-10884-w **(IF: 4.4)**
9. Ali A, **Khatoon A,** Saleemi MK, Abbas RZ, Murtaza B, Akbar K, Tanveer Q, Bahadur SU, Alodaini HA, Alghamdi MA. 2025. Novel yeast Pichia kudriavzevii alleviates aflatoxins induced toxicopathology in broiler chickens through immunomodulation and antioxidant enhancement. Ecotoxicology and Environmental Safety. 289:117639. https://doi.org/10.1016/j.ecoenv.2024.117639
10. Murtaza B, Ling-ling G, Wang L, Li X, Ali A, Saleemi MK, **Khatoon A,** Haq SU, Jin B, Li JB, Xu Y. 2025. Mycotoxin detection in corn and distillers dried grains for food security. Renewable and Sustainable Energy Reviews. 1; 210:115194. https://doi.org/10.1016/j.rser.2024.115194
11. Jamil M, **Khatoon A,** Saleemi MK, Abbas RZ. 2025. *Bacillus licheniformis* as a protective agent in broiler chicken concurrently exposed to mycotoxins and necrotic enteritis: Toxicopathological and hematobiochemical perspectives. Microbial Pathogenesis. 1; 198:107108. https://doi.org/10.1016/j.micpath.2024.107108

12. Ali A, Ajmal T, **Khatoon A,** Akbar K, Irshad U, Murtaza B, Ji Z, Ali A, Tanveer Q, Su Z. 2025. Molecular Insights into RNA Modifications and their Role in Shaping Immune Responses and Tumor Microenvironments. Current gene therapy https://doi.org/10.2174/0115665232335322241205063758 .
13. Ali, A., Younas, K., **Khatoon, A.,** Murtaza, B., Ji, Z., Akbar, K., ... & Su, Z. (2025). Immune Watchdogs: Tissue-Resident Lymphocytes as Key Players in Cancer Defense. *Critical Reviews in Oncology/Hematology*, 208, 104644. https://doi.org/10.1016/j.critrevonc.2025.104644
14. Rasheed Y, Ehsan N, Hayat MF, Ashraf A, Khan HA, **Khatoon A,** Ijaz MU, Raouf Y, Samadi A, Chtita S. 2025. Protective role of poncirin against polyethylene microplastics instigated cardiac toxicity via regulating Nrf2/keap1 pathway. Asian Journal of Agriculture and Biology. (1):2023361. https://doi.org/10.35495/ajab.2023.361.
15. Gul ST, Tahir MZ, Ahmad L, **Khatoon A,** Saleemi MK, Ataya FS, Hussain R, Maqbool B, Fouad D, Khan A. 2025. Fipronil in sub-lethal doses leads to immuno-toxicological effects in broiler birds. PloS one. 20(1):e0315915. https://doi.org/10.1371/journal.pone.0315915
16. Ali A, **A Khatoon,** C Shao, B Murtaza, Q Tanveer and Z Su. 2024. Therapeutic potential of natural antisense transcripts and various mechanisms involved for clinical applications and disease prevention. RNA Biology, 21, (1): 1-18. https://doi.org/10.1080/15476286.2023.2293335
17. Saleemi MK, A Raza, **A Khatoon,** M Zubair, ST Gul, X Yongping, B Murtaza, F Muhammad, B Akhtar, F Jubeen, F Rizvi, K Zubair[1], A Ashraf, MN Ijaz, A Sultan, 2024. Pathological Effects of Feeding Aflatoxins Contaminated Feed on Immune Status and Reproductive Performance of Juvenile White Leghorn Males and its Mitigation with ∝- Tocopherol and *Moringa oleifera.* Environ Sci Pollut Res Int., 31(2):2156-2166. doi: https://doi.org/10.1007/s11356-023-31194-0
18. Jamil M, **A Khatoon,** MK Saleemi, Z Abidin, RZ Abbas, Z Hassan, Sheraz Ahmed Bhatti, H Irshad, M Imran, and QS Raza. 2024. Use of phytochemicals to control the Mycotoxicosis in poultry. World's Poultry Science Journal, 80 (1), 237–250. https://doi.org/10.1080/00439339.2023.2255575
19. Murtaza B, L Wang, X Li, MY Nawaz, MK Saleemi, **A Khatoon,** X Yongping. 2024. Recalling the reported toxicity assessment of deoxynivalenol, mitigating strategies and its toxicity mechanism: Comprehensive review. Chemico-Biological Interactions 387: 110799 https://doi.org/10.1016/j.cbi.2023.110799
20. Hayajneh FMF, Ahmed Z, **Khatoon A,** Saleemi MK Arshad MI and Gul ST, 2024. Epidemiological investigations of *Mycoplasma bovis*-associated mastitis in dairy animals along with analysis of interleukin-6 (IL-6) as a potential diagnostic marker. International Journal of Veterinary Science 13(1): 120-126. https://doi.org/10.47278/journal.ijvs/2023.072
21. Ijaz MU, M Khalil, A Hamza, **A Khatoon.** 2023. Attenuative effects of tamarixetin against polystyrene microplastics-induced hepatotoxicity in rats by regulation of Nrf-2/Keap-1 pathway. Cell Biochem Funct. 41:1451-1461.
22. Raza R, Guangbin Z, Ahmad L, Maqbool B, Saleemi MK, Arshad MI, **Khatoon A,** Soomro H, Khan A and Gul ST. 2023. Ameliorative effects of Vitamin E and Urtica dioica against thiamethoxam-induced teratogenicity in embryonated chicken eggs. Adv. Life Sci. 10(4): 577-584.
23. **Khatoon A,** MY Nawaz, G Mehboob, MK Saleemi, ST Gul, RZ Abbas, MU Ijaz, B Murtaza, SA Bhatti, Z Abidin, AR Khan, 2023. Unraveling the combined deleterious effects of ochratoxin A and atrazine upon broiler's health: Toxicopathological, serum biochemical and immunological perspectives. Toxicon 236: 107327.
24. Murtaza B, L Wang, X Li, MY Nawaz, MK Saleemi, **A Khatoon,** X Yongping. 2023. Mitigation of zearalenone in vitro using probiotic strain. LWT - Food Science and Technology, 186 (2023) 115265. https://doi.org/10.1016/j.lwt.2023.115265
25. Saleemi MK, Raza A, **Khatoon A**, Zubair M, Yongping X, Murtaza B, Li X, Jamil M, Imran M, Muhammad F, Zubair K, Bhatti SA, Rafique MK, Ahmed I, Azal F, Jubeen F and Basit A, 2023. Toxic effects of aflatoxin B1 on hematobiochemical and histopathological parameters of juvenile white leghorn male birds and their amelioration with vitamin E and Moringa oleifera. Pak Vet J, 43(3): 405-411. http://dx.doi.org/10.29261/pakvetj/2023.053

26. Maqsood I, **A Khatoon,** Z Abidin, R Kausar, MA Qureshi, AR Khan, A Rana, Z Fareed and MA Iqbal. 2023. Biological control of malathion induced toxicity through dietary supplementation of *Spirulina platensis* in white Swiss albino mice. Bioscience Research, 2023 20(3): 819-830.
27. Murtaza B, X Li, L Dong, MK Saleemi, J Bowen, L Wang, **A Khatoon,** A Ali and Y Xu, 2023. New trends for the efficient bio-degradation of food contaminant zearalenone using a plant rhizobacterial strain: an in-vitro study. World Mycotoxin Journal, 16(3), 251-260. https://doi.org/10.3920/WMJ2022.2798 **(IF: 2.695)**
28. Usmani MW, F Rizvi F, **A Khatoon** and MS Mahmood, 2022. Seroprevalence, associated risk factors and clinico-pathological studies of buffalopox disease in various regions of Punjab province, Pakistan. Polish Journal of Veterinary Sciences, 25(1):137-147. **(IF: 0859)**
29. Ali A, **A Khatoon**, HM Almohaimeed, F Al-Sarraj, R Albiheyri, I Alotibi and Z Abidin, 2022. Mitigative Potential of Novel Lactobacillus plantarum TISTR 2076 against the Aflatoxins-Associated Oxidative Stress and Histopathological Alterations in Liver and Kidney of Broiler Chicks during the Entire Growth Period. Toxins. 2022; 4(10):689. **(IF: 5.075)**
30. **Khatoon A,** Z Abidin, ST Gul, AR Khan, M Naeem, MA Qureshi, A Ali and MY Nawaz MY, 2022. Lyophilization as a possible way to enhance the viability of live Newcastle disease (LaSota) vaccine: Suggesting the optimized method by comparing five different protocols. Pakistan Veterinary Journal. 2022; 42(3): 404-408**. (IF: 1803)**
31. Jamil, M, MT Aleem, A Shaukat, A Khan, M Mohsin, T Rehman, RZ Abbas, MK Saleemi, **A Khatoon**, W Baber, R. Yan and K. Li. 2022. Medicinal Plants as an Alternative to Control Poultry Parasitic Diseases." Life, 12 (3): 449. **(IF: 3.253)**
32. Zahoor, MA, ST Gul, **A Khatoon**, M Ashraf, M Zubair, M Imran, B Maqbool and FA Atif. 2022. Teratogenic Effects of Thiamethoxam (a Neonicotinoid) on Development of Chick Embryo. Pakistan Veterinary Journal, DOI: 10.29261/pakvetj/2022.033 **(IF: 1.318)**
33. Nasir A, MK Saleemi, MZ Khan, **A Khatoon**, Z Hassan, Z Abidin, W Ahmad, SA Bhatti, MM Khan, T Jamil, Z Fatima, I Ahmad and A Khan, 2022. Effects of Hydrated Sodium Calcium Aluminum Silicates (HSCAS) in experimentally induced cadmium toxicity in male Japanese Quail (*Coturnix japonica*). Toxin Reviews, 41: 743-751 **(IF: 3.166)**
34. Ali, A., **A. Khatoon**, M.K Saleemi, R.Z. Abbas. 2021. Aflatoxins associated oxidative stress and immunological alterations are mitigated by dietary supplementation of *Pichia kudriavzevii* in broiler chicks. 2021. Microbial Pathogenesis, Volume 161, Part A, **(IF: 3.738)**