

CURRICULUM VITAE



Dr. Rifat Ullah Khan

CONTACT INFORMATION

Kote Mehter Post Office M: +92 315 708 0951
Ghoriwala, Bannu
Pakistan E-Mail: rukhan@aup.edu.pk

PERSONAL INFORMATION

Father's Name: Naqib Ullah Khan

Nationality: Pakistan

Domicile: Bannu

C.N.I.C # 11101-7886617-3

Date of Birth: 12-02-1980

Gender: Male

Marital Status: Married

Permanent Address: Kote Mehter Post Office Ghoriwala, Bannu, Pakistan

Job Title: Professor

Job Place: College of Veterinary Sciences, The University of Agriculture, Peshawar, Pakistan

ACADEMIC BACKGROUND

| DEGREE | University/ Board | DIVISION | YEAR |
|--|---|-----------------|------|
| PhD (Vet. Physiology) | University of Agriculture Faisalabad, Pakistan | 1 st | 2012 |
| M.Sc (Hons) | The University of Agriculture, Peshawar, Pakistan | 1 st | 2006 |
| Doctor of Veterinary Medicine (DVM) | University of Veterinary and Animal Sciences Lahore, Pakistan | 1 st | 2002 |
| F.Sc (Pre-Medical) | B.I.S.E Bannu | 1 st | 1997 |
| Matric | B.I.S.E Bannu | 1 st | 1995 |

Research publications (Impact Factor Journals)

- 1) Hafeez, A., Awan, H., Naz, S., Alhidary, I.A., **R.U. Khan**, Konca, Y., Shakirullah, Rahman, H.U. and Selvaggi, M. 2024. Effect of graded levels of soybean oil supplementation as an energy source on broiler performance, carcass characteristics, and nutrient digestibility. *Pakistan Journal of Zoology*: <https://dx.doi.org/10.17582/journal.pjz/20240209140620>
- 2) Hafeez, A., Sikandar, R., Naz, S., Alhidary, I.A., **R.U. Khan**, and Tarricone, S. 2024. Impact of eggs storage time and duration of fumigation on hatchability, embryonic mortality and characteristics of day old chicks. *Pakistan Journal of Zoology*
- 3) Ahsan, T., Tahir, M., Naz, S., **R.U. Khan**, Alhidary, I.A., Abdelrahman, S.H. and Selvaggi, M. 2024. Effect of soy hulls as alternative ingredient on growth performance, carcass quality, nutrients digestibility and intestinal histological features in broilers. *Italian Journal of Animal Science* 23: 1336-1347 <https://doi.org/10.1080/1828051X.2024.2397495>
- 4) Hafeez, A., Khan, R.U., Naz, S., Batool, S., **R.U. Khan**, Alhidary, I.A., Abdelrahman, S.H. and Tiwari, R. 2024. Ameliorative effect of Aloe vera supplementation on the growth indices,intestinal health and oocysts shedding under an experimentally challengedwith coccidia in Japanese quails. *Italian Journal of Animal Science* 23: 1269-1278. <https://doi.org/10.1080/1828051X.2024.2391552>
- 5) Ahmad, A., Sultan, A., Naz, S., Chand, N., Islam, Z., Alhidary, I.A., **R.U. Khan**, Abdelrahman, S.H. and Dai, S. 2024. Growth performance, nutrients digestibility, intestinal microbiota and histology altered in broilers fed maize- or sorghum-based diets. *Veterinary Quarterly* 44:1-8. <https://doi.org/10.1080/01652176.2024.2373295>
- 6) Arooj, S., Naz, S., Qaisar, A., Satti, S., Razzaq, A., Alhidary, I. **R.U. Khan**, and Tufarelli, V. 2024. Estimation of heavy metals enrichment and geo-accumulation associated with habitat quality from selected wildlife parks. *Soil and Sediment Contamination* (Accepted)
- 7) Zada, T., Khan, S., Isalm, Z., Sultan, A., Khan, K., albekairi, T.H, Khan, A., Aziz, T. and **R.U. Khan**. 2024. Growth performance, serum biochemical profile and liver histopathologyof broiler chickens supplemented with graded level of dried sprouted wheat grains. *Italian Journal of Animal Science*, 23: 880-886. [10.1080/1828051X.2024.2356213](https://doi.org/10.1080/1828051X.2024.2356213)
- 8) Khan, M., Chand, N., Khan, S., Naz, S., Alrefaei, A.F., Chandrasekaran, A. and **R.U. Khan**. 2024. Partial replacement of soybean meal with *Musca domestica* larvae meal in broiler diets: implications for growth performance, nutrient utilization, hemato-biochemical profile and organoleptic characteristics. *Archives of Animal Breeding* 67: 247–257 <https://doi.org/10.5194/aab-67-247-2024>
- 9) Hafeez, A., Ullah, S., Naz, S., Alrefaei, A.F., **R.U. Khan**, Abdelrahman, S., Losacco, C. and Selvaggi, M. 2024. Effect of dietary polyphenol rich grape (*vitis vinifera*) seed extract supplementation on production performance, egg quality, plasma MDA, reproductive performance and faecal microbiota of golden laying hens. *Journal of Applied Animal Research* 52: [10.1080/09712119.2024.2365748](https://doi.org/10.1080/09712119.2024.2365748)
- 10) Sana, B., Chand, N., Naz, S., Alhidary, I.A., **R.U. Khan**, Shamsi, S., Losacco, C., and Tufarelli, V. 2024. Effect of f hempseed (*Cannabis sativa L.*) in diet on growth, gut

- health, and immunity in broilers. *Veterinary Quarterly* 44: 1-10. [10.1080/01652176.2024.2367214](https://doi.org/10.1080/01652176.2024.2367214)
- 11) Khan, S.M., **R.U. Khan**, Khan, H. and Khan, S. 2024. Effects of calcium supplementation on blood metabolites, subclinical mastitis and reproductive efficiency in poor performing postpartum dairy cows. *Pakistan Journal of Zoology*
- 12) Farooq, K., Sultan, A., Shah, A.A., **R.U. Khan**, Khan, R., Yasmeen, G and Khan, N.A. 2024. Maize silage and ryegrass fodder blend-based diets to optimize growth performance, nutrients digestibility, and methane gas production of fattening calves. *International Journal of Agriculture and Biological Engineering*
- 13) Hafeez, A., Sikandar, R., Naz, S., Alhidary, I.A., **R.U. Khan**, Tarricone S. 2024. Impact of eggs storage time and duration of fumigation on hatchability, embryonic mortality and characteristics of day old chicks. *Pakistan Journal of Zoology*
- 14) Sultan, A., Murtaza, S., Naz, S., Islam, Z., Alrefaei, A.F., **R.U. Khan**, Abdelrahman, S. and Chandrasekaran, A. 2024. Live performance, nutrient digestibility, immuneresponse and fecal microbial load modulation in Japanese quails fed a Bacillus-based probiotic alone or combination with xylanase. *Veterinary Quarterly*, 44: 1-9 [10.1080/01652176.2024.2364641](https://doi.org/10.1080/01652176.2024.2364641)
- 15) Sultan, A., Bibi, S., Naz, S., Islam, Z., Alrefaei, A.F., **R.U. Khan**, Abdelrahman, S. and Selvaggi, M. 2024. Effect of anise seed (*Pimpinella anisum L.*) and protease alone or in combination on growth performance, carcass characteristics, humoral immunity, nutrients digestibility and cecal microbiota in Japanese quails. *Food and Agriculture Immunology* 35:351 [10.1080/09540105.2024.2351362](https://doi.org/10.1080/09540105.2024.2351362)
- 16) Ayyub, A., Naz, S., Arooj, S., Alhidary, I., **R.U. Khan** and Pugliese, G. 2024. Seasonal variations in behavioral activity patterns of Antilope cervicapra in captivity. *Pakistan Journal of Zoology* <https://dx.doi.org/10.17582/journal.pjz/20231125050818>
- 17) Nasir, J.A., Chand, N., Hafeez, A. and **R.U. Khan**. 2024. Enhancing growth performance, immunity, and gut morphology in quails through oyster mushroom stem waste supplementation. *Pakistan Journal of Zoology* 56: 2301-2310. <https://dx.doi.org/10.17582/journal.pjz/20231115021054>
- 18) Guo, H., Wan, H., Lou, W., **R.U. Khan**, You, J., Huang, B., Hao, S., Li, G. and Dai, S. 2024. Deoxynivalenol and T-2 toxin cause liver damage and egg quality degradation through endoplasmic reticulum stress in summer laying hens. *International Journal of Biometeorology* [10.1007/s00484-024-02674-w](https://doi.org/10.1007/s00484-024-02674-w)
- 19) Khan, S.M., **R.U. Khan**, Naz, S., Alrefaei, A.F., and Tufarelli, V. 2024. Interaction of blood calcium with milk yield, energy metabolites, subclinical mastitis, and reproductive performance in crossbred dairy cows. *Reproduction in Domestic Animals* 59:e14557. [10.1111/rda.14557](https://doi.org/10.1111/rda.14557)
- 20) Muhammad, M.D., Chand, N., Naz, S., Alhidary I.A., Shah, A.A., **R.U. Khan**, Losacco, C. 2024. Adaptation to Heat Stress in Broilers Using Dried Tomato Pomace and Zinc: Effects on Growth Performance, Oxidative Stress, Intestinal Features and Humoral Immunity. *Pakistan Journal of Zoology*
- 21) Naz, S., Bibi, G., Nadeem, R., Alhidary, I.A., Dai, S., Israr, M. and **R.U. Khan**. 2024. Evaluation of biological selenium nanoparticles on growth performance, histopathology of vital organs and genotoxicity in Japanese quails (*Coturnix coturnix japonica*). *Veterinary Quarterly* 44: 1-10. [10.1080/01652176.2024.2319830](https://doi.org/10.1080/01652176.2024.2319830)
- 22) Khan, R., Tahir, M., Naz, S., Alhidary, I.A., Shamsi, S., Dai, S., **R.U. Khan**, V. Tufarelli. 2024. Integrating dietary supplementation with poppy (*Papaver somniferum*

- L.) seed meal: effects on growth performance, nutrient digestibility, and faecal microbiota in broilers. *Archives of Animal Breeding* 67: 73-80. <https://doi.org/10.5194/aab-67-73-2024>, 2024
- 23) Kausar, S., Chand, N., Naz, S., Alhidary, I.A., Dai, S., Ayasan, T., **R.U. Khan**. 2024. In vitro and in vivo effects of methanolic extract of dietary ginger (*Zingiber officinale*) and onion (*Allium cepa*) supplementation on growth performance and fecal microbiota in *Escherichia coli* infected broiler chickens. *Livestock Science* 281:105416 <https://doi.org/10.1016/j.livsci.2024.105416>
- 24) Hafeez, A., Khan, D., Naz, S., Alonaizan, R., Al-Akeel, R.K., Israr, M. **R.U. Khan**. 2024. Effect of *Azolla pinnata* meal on growth, immunity, faecal *E. coli*, antioxidant capacity and gut histomorphology in Japanese quails. *Journal of Applied Animal Research* 52: 2310750 <https://doi.org/10.1080/09712119.2024.2310750>
- 25) Al-Atiyat, R.M., Suliman, G.M., Abu-Alruz, K., Al-Zyoud, F., Mamkagh, A., M. El-Waziry, A., Al-Owaimer, A.N. and **R.U. Khan**. 2024. Multivariate Discriminant Analysis on Differentiating Sheep Breeds Based on Live Body and Carcass Measurements. *Pakistan Journal of Zoology*, 56: 571-578. <https://dx.doi.org/10.17582/journal.pjz/20230816022706>
- 26) Bingqian, N., Shah, A.A., Ullah, S., **R.U. Khan**, Khan, M.S., Zaman A. and Muhammad, K. 2024. Exploring the role of insects as sustainable feed in aquaculture nutrition and enhancing antioxidant capacity, growth and immune response. *Turkish Journal of Fisheries and Aquaculture* 24 (5): TRJFAS24581
- 27) Gul, F., Amin, H., Naz, S., Khan, M.T., Alhidary, I.A., **R.U. Khan**, Pugliese, G. and Tufarelli V. 2024. Evaluation of blood minerals and oxidative stress changing pattern in pre-partum and post-partum Achai and Holstein Friesian dairy cows. *Reproduction in Domestic Animals* 59:e14525. DOI: 10.1111/rda.14525
- 28) Zhang X, Khan NA, Yao E, Kong F, Chen M, **R.U. Khan** et al. 2024. Effect of growing regions on morphological characteristics, protein subfractions, rumen degradation and molecular structures of various whole-plant silage corn cultivars. *PLoS ONE* 19(1): e0282547. <https://doi.org/10.1371/journal.pone.0282547>
- 29) Naz, S., Raza, N., Alhidary, I., Satti, S., Rafique, A., Batool, S., Shamsi, S., Dai, S. and **R.U. Khan**. 2024. Evaluation of copper nanoparticles on growth, organs histology and DNA damage in Japanese quails (*Coturnix coturnix japonica*). *Toxin Reviews* 43: 127-136. <https://doi.org/10.1080/15569543.2023.2298909>
- 30) Khan, M.I., Chand, N., Naz, S., Alonaizan, R., Hu, H. Shamsi, S. and **R.U. Khan**. 2024. Effects of zinc supplementation from organic and inorganic sources on growth, blood biochemical indices, and intestinal microarchitecture in broilers. *Veterinary Quarterly* 44 (1) 2298491 [10.1080/01652176.2023.2298491](https://doi.org/10.1080/01652176.2023.2298491)
- 31) Hafeez, A., Ali, S.S., Akhtar, J., Naz, S., Alrefai, A.F., Albeshr, M.F., Israr, M. and **R.U. Khan**. 2024. Impact of coriander (*Coriandrum sativum*), garlic (*Allium sativum*), fenugreek (*Trigonella foenum-graecum*) on zootechnical performance, carcass quality, blood metabolites and nutrient digestibility in broilers chickens. *Veterinary Quarterly* 44 (1):1-7 <https://doi.org/10.1080/01652176.2023.2300948>
- 32) Lou, W., Wu, W., Guo, H., Xiao, S., **R.U. Khan**, Zhang, X., Li, G. and Dai, S. 2023. Ameliorative effect of dietary glutamine on antioxidant capacity of broiler chicks during starter phase under cold stress. *Pakistan Journal of Zoology* 56: 1433-1438. <https://dx.doi.org/10.17582/journal.pjz/20221013091007>
- 33) Hafeez, A., Piral, Q., Naz, S., Almutairi, M.H., Alrefaei, A.F., Ayasan, T. **R.U.**

- Khan**, and Losacco, C. 2023. Ameliorative effect of pomegranate peel powder on the growth indices, oocysts shedding, and intestinal health of broilers under an experimentally induced coccidiosis condition. *Animals* 13, 3790. <https://doi.org/10.3390/ani13243790>
- 34) Bingqian, N., Shah, A.A., Marta M., Wanapat, M., **R.U. Khan**, Ahmad, S., Ullah, S., Khan, M.S. and Shah, M.K., 2023. Insect bioactive compounds and their potential use in animal diets and medicine. *Entomological Research* 53: 429-443 *Research* <https://doi.org/10.1111/1748-5967.12682>
- 35) Imtiaz, M., Chand, N., Naz, S., Alhidry, I.A., Gul, S. and **R.U. Khan**. 2023. Effects of dietary inclusion of *Moringa oleifera* methanolic extract on productive performance, humoral immunity and nutrient digestibility in Japanese quails. *Journal of Applied Animal Research* 51: 743-748. [10.1080/09712119.2023.2278878](https://doi.org/10.1080/09712119.2023.2278878)
- 36) Hafeez, A., Ahmad, I., Naz, S., Alonaizan, R., Al-akeel, R.K., **R.U. Khan**, Tufarelli, V. 2023. Effect of Lemon (*Citrus limon*, L.) Peel Powder on Oocyst Shedding, Intestinal Health, and Performance of Broilers Exposed to *E. tenella* Challenge. *Animals* 13, 3533. <https://doi.org/10.3390/ani13223533>
- 37) Subhan, F., Chand, N., Naz, S., Alonaizan, R., Hu, H., Shamsi, S., and **R.U. Khan**. 2023. Effect of green tea (*Camellia sinensis* L.) as antimicrobial agent on growth performance and ileal histomorphology of broiler chickens. *Journal of Applied Animal Research* 51:771-775 <https://doi.org/10.1080/09712119.2023.2283183>
- 38) Nasir, J.A., Chand, N., Naz, S., Alhidary, I.A., **R.U. Khan**, Batool, S., Zelai, N.T., Pugliese, G., Tufarelli, V. and Losacco, C. 2023. Dietary Oyster Mushroom (*Pleurotus ostreatus*) Waste Inhibits Experimentally Induced *Eimeria tenella* Challenge in Japanese Quails Model. *Animals* 13, 3421. <https://doi.org/10.3390/ani13213421>
- 39) Raza, M.H., Tahir, M., Naz, S., Alhidary, I.A., **R.U. Khan**, Losacco, C., Tufarelli, V. 2023. Dried Date (*Phoenix dactylifera* L.) Meal Inclusion in the Diets of Broilers Affects Growth Performance, Carcass Traits, Nutrients Digestibility, Fecal Microbiota and Economics. *Agriculture* 13, 1978. <https://doi.org/10.3390/agriculture13101978>
- 40) Khan, M., Chand, N., Khan, S., Naz, S., Alrefai, A.F., Almutairi, M.K., Sifa, D. and **R.U. Khan**. 2023. Partial and Total Replacement of Soybean Meal with maggot larvae meal in Broiler Chicken Diets: Impact on growth performance, nutrients digestibility, Haemotological Parameters and Intestinal Histomorphology. *Livestock Science* 277: 105355. <https://doi.org/10.1016/j.livsci.2023.105355>
- 41) Hafeez, A., Ali, S.S., Akhtar, J., Naz, S., Alhidary, I.A., Israr, M. and **R.U. Khan**. 2023. Garlic (*Allium sativum*), fenugreek (*Trigonella foenum-graecum*) and coriander (*Coriandrum sativum*): performance, nutrient digestibility and blood metabolites in broilers. *Journal of Applied Animal Research*, 51:1, 624-629. [10.1080/09712119.2023.2264966](https://doi.org/10.1080/09712119.2023.2264966)
- 42) Ullah, N., Khan, M. T., Naz, S., Alhidary, I. A., **R.U. Khan**, Losacco, C., Pugliese, G., & Tufarelli, V. 2023. Blood metabolic pattern and somatic cells dynamic in Achai and Holstein Friesian cows during transition period. *Reproduction in Domestic Animals*, 58: 1712–1717. <https://doi.org/10.1111/rda.14489>
- 43) Aslam, B., Hussain, A., Faisal, M.N., Sindhu, Z.D., **R.U. Khan**; Alhidary, I.A., Naz, S., Tufarelli, V. 2023. Curcumin Co-Encapsulation Potentiates Anti-Arthritic Efficacy of Meloxicam Biodegradable Nanoparticles in Adjuvant-Induced Arthritis

- Animal Model. *Biomedicines* 2023, 11, 2662. <https://doi.org/10.3390/biomedicines11102662>
- 44) Hafeez, A., Hassni, S.F., Naz, S., Alonaizan, R., Al-Akeel, R.K., Dai, S., Shamsi, S. and **R.U. Khan**. 2023. Impact of grape (*Vitis vinifera*) seed extract on egg production traits, nutrients digestibility, lipid peroxidation and fertility of golden laying hens (*Gallus gallus*) during early stage of production. *Veterinary Quarterly* 43: 1-7 <https://doi.org/10.1080/01652176.2023.2262543>
- 45) Saeed, M., Afzal, Z., Afzal, Z., **R.U. Khan**, Elnesr, S.S., Alagwany, M. and Chen H. 2023. Food free of antibiotic residues: Use of postbiotic as growth promoter in poultry industry- A review of current knowledge and future prospects. *Food Science of Animal Resources* 43:1111-1127. <https://doi.org/10.5851/kosfa.2023.e52>
- 46) Khan, S., Chand, N., Naz, S., Alrefaei, A.F., Albeshr, M.F., Losacco, C. and **R.U. Khan**. 2023. Response to dietary methionine and organic zinc in broilers against coccidia under *Eimeria tenella*-challenged condition. *Livestock Science*, 276 p.105317. <https://doi.org/10.1016/j.livsci.2023.105317>
- 47) Fu, C., Shah, A.A., **R.U. Khan**, Khan, M.S. and Wanapat, M. 2023. Emerging trends and applications in health-boosting microorganisms-specific strains for enhancing animal health. *Microbial Pathogenesis* <https://doi.org/10.1016/j.micpath.2023.106290>
- 48) Aslam, B., Hussain, A., Bari, M.U., Faisal, M.N., Sindhu, Z.u.D., Alonaizan, R., Al-Akeel, R.K., Naz, S. and **R.U. Khan**. 2023. Anti-Pyretic, Analgesic, and Anti-Inflammatory Activities of Meloxicam and Curcumin Co-Encapsulated PLGA Nanoparticles in Acute Experimental Models. *Metabolites* 13, 935. <https://doi.org/10.3390/metabo13080935>
- 49) Saeed, M., Hussain, N., Ahmad, S., **R.U. Khan**, Andoh, V., Hussain, S. and Huayou, C. 2023. The potential of lactoferrin: a call for future research in poultry nutrition. *World's Poultry Science Journal* 79 (4):731-750. <https://doi.org/10.1080/00439339.2023.2239764>
- 50) Saeed, M., Aslam, F., Khan, M.S., Kamboh, A.A., Farooq, Z., **R.U. Khan**, Sultan, R., Moryani, A.A and Chen H. 2023. Nutritional significance and health benefits of quail's meat and eggs: an empirical review. *Pakistan Journal of Zoology* (Online): <https://dx.doi.org/10.17582/journal.pjz/20220507070529>
- 51) Arooj, S. Naz, S., Qaisar, A., Satti, S., Razzaq, A., Alrefaei, A.F., Albeshr, M.F., Dai, S. and **R.U. Khan**. 2023. Interspecific heavy metal variations and bioaccumulation in peafowl (*Pavo cristatus*). *Journal of Applied Animal Research* 51:530-539. [10.1080/09712119.2023.2233587](https://doi.org/10.1080/09712119.2023.2233587)
- 52) Awan, A.K., Sultan, N., Khan, R.A., Sultana, R., Umm-e-Kalsoom, Sahibzada, F.A., **R.U. Khan**, Khan, N.A., Khan, N.A., Zaman, S.H., Shah, M.S. and Shah, A.A. 2023. Antioxidant and antidiabetic potentials of *Punica granatum* peel extracts in alloxan induced diabetic Albino rats. *Pakistan Journal of Zoology*, <https://dx.doi.org/10.17582/journal.pjz/20220515110519>
- 53) Aslam, B., Hussain, A., Sindhu, Z., Nigar, N., Jan, I.U., Alrefaei, A.F., Albeshr, M.F., Tufarelli V. and **R.U. Khan**. 2023. Polyphenols-rich polyherbal mixture attenuates hepatorenal impairment, dyslipidaemia, oxidative stress and inflammation in alloxan-induced diabetic rats. *Journal of Applied Animal Research*, 51: 516-524, [10.1080/09712119.2023.2230754](https://doi.org/10.1080/09712119.2023.2230754)
- 54) Bai, X., Wang, K., **R.U. Khan**, Zhang, C. Hu, H. 2023. Effect of Glutamine on the Growth Performance, Oxidative Stress, and Nrf2/p38 MAPK Expression in the Livers of Heat-Stressed Broilers. *Animals* 13, 652. <https://doi.org/10.3390/ani13040652>
- 55) De Marzo, D., Bozzo, G., Ceci, E., Losacco, C., Dimuccio, M.M., **R.U. Khan**,

- 56) Laudadio, V. and Tufarelli, V. 2023 Enrichment of dairy type lamb diet with microencapsulated omega-3 fish oil: effects on growth, carcass quality and meat fatty acids. *Life* 13, 275. <https://doi.org/10.3390/life13020275>
- 57) Saeeda, K., Chand, N., Khan, N.U., Saeed, M. and **R.U. Khan**. 2023. Dietary organic zinc and probiotic alleviate induced *Eimeria tenella* infection in Japanese quails model of coccidiosis. *Tropical Animal Health and Production*, 55:37. <https://doi.org/10.1007/s11250-022-03449-4>
- 58) **R.U., Khan**, Naz, S., Ullah, H., Ullah, Q., Laudadio, V., Bozzo, G. and Tufarelli, V. 2023. Physiological dynamics in broiler chickens during heat stress and possible mitigation strategies. *Animal Biotechnology* 34: 438-447. <https://doi.org/10.1080/10495398.2021.1972005>
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- 63) Khan, D., Chand, N., Saeed, M., Tahir, M., Zeb, A., **R.U. Khan**. 2023. Effects of silver nitrate as alternative to antibiotic on production performance, bacterial count and intestinal histological features of broiler under *Escherichia coli* challenge. *Pakistan Journal of Zoology* 55:1701-1708. <https://dx.doi.org/10.17582/journal.pjz/20220223080217>
- 64) **Khan, R.U.**, Khan, A., Muhammad, M.D. and Naz, S. 2023. Tomato pomace waste as safe feed additive for poultry health and production: a review. *Annals of Animal Science* 23: 39-51. [10.2478/aoas-2022-0026](https://doi.org/10.2478/aoas-2022-0026)
- 65) **Khan, R.U.**, Naz, S., Ullah, H., Khan, N.A., Laudadio, V., Ragni, M., Piemontese, L. Tufarelli, V. 2023. Dietary vitamin D: growth, physiological and health consequences in broiler production. *Animal Biotechnology* 34:1635-1641 doi: <https://doi.org/10.1080/10495398.2021.2013861>
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- 67) **Khan, R.U.**, Naz, S., De Marzo, D., Dimuccio, M.M., Bozzo, G., Tufarelli, V., Losacco, C. and Ragni, M. 2023. *Aloe vera*: A sustainable green alternative to exclude antibiotics in modern poultry production. *Antibiotics* 12, 44. <https://doi.org/10.3390/antibiotics12010044>
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- 6) Chand N, H. Faheem, **R.U. Khan** and T. Raza, 2016. Antiparasitic effect of mananoligosacheride against experimentally induced coccidiosis in broiler. 5th Mediterranean Poultry Summit of the WPSA Italy, Spain and France. 20 – 25 October 2016. Poultry Health (ID: 110007).
- 7) Alam, M., N. Chand, A. Ali, M.S. Qureshi and **R. U. Khan**, 2015. Effect of organic acids on the performance of Japanese quails. Proceedings 3rd International Workshop Dairy Science Park, Nov, 16-18, 2015.
- 8) Sultan A, S. Khan, **R. U. Khan** and M. Ilyas, 2015. A yeast carbohydrate fraction improved growth performance, apparent metabolizable energy and mineral retention by broiler at 21 day post-hatch. Australian Poultry Science Symposium. P: 26
- 9) Shahid, S., N. Chand and **R.U. Khan**. 2015. Hemp seeds (*Cannabis sativa L.*): influence on cholesterol and fatty acids composition in egg yolk. XXII European Symposium on the Quality of Poultry Meat and XVI European Symposium on the Quality of Eggs and Egg Products. 10-13 March, Nantes, France. Published by World's Poultry Science

Journal, Volume 71, Supplement 1. P: 114.

- 10) A. Khan, M. S. Qureshi, **R.U. Khan**, U. Saddique, I. M. Khan, S. M. H. Andrabi, A. Gohar, M. Younas, H. Khan, H. Rehman and Zakirullah. 2015. Effects of Different Equilibration Times on Cell Membrane and DNA Integrity of Sperm after Cryo-Reservation in Cattle Breeds. International Symposium on Dairy Animal Reproduction (ISDAR), March 30-31 2015, Lahore Pakistan.
- 11) H. Rehman, M. S. Qureshi, **R. U. Khan**, U. Saddique, A. Khan, A. Gohar, M. Younas, H. Khan and I. M. Khan, Zakirullah. 2015. Relationship of Age, Breed and Libido with Semen Traits of Cattle Bulls. International Symposium on Dairy Animal Reproduction (ISDAR), March 30-31 2015, Lahore Pakistan.
- 12) I. M. Khan, M. S. Qureshi, **R.U. Khan**, U.Saddique, A. Khan, S. M. H. Andrabi, A. Gohar, M. Younas, H. Khan, H. Rehman and Zakirullah. 2015. Cross Breeding Promotes Deterioration of Semen Quality in Cattle. International Symposium on Dairy Animal Reproduction (ISDAR), March 30-31 2015, Lahore Pakistan.
- 13) Zakirullah, H. Khan, M. S. Qureshi, M. Younas, A. Gohar, **R. U. Khan**, S. S. Afridi, H. Rehman and U. Saddique, I. M. Khan and A. Khan. 2015. International Symposium on Dairy Animal Reproduction (ISDAR), March 30-31 2015, Lahore Pakistan.
- 14) Muhammad Subhan Qureshi, **Rifat Ullah Khan** and Abdul Majid. 2013. Semen traits, seminal plasma antioxidant enzymes and trace minerals as influenced by different levels of dietary vitamin E in Beetal bucks. Proceedings of 2nd International Dairy Science Park, Nov 18-20, University of Agriculture, Peshawar, Pakistan.
- 15) Asar Ali Shah, **Rifat Ullah Khan**, Muhammad Saleem Khan, Sarzamin Khan, Nazir Ahamd and Muhammad Humayun. 2013. Effect of different levels of vitamin E on the performance traits, serum antioxidant enzymes and trace minerals in Japanese quail (*Coturnix contornix Japanica*). Proceedings of 2nd International Dairy Science Park, Nov 18-20, University of Agriculture, Peshawar, Pakistan. Page: 142.
- 16) Rifat Ullah Khan and Zia-ur-Rahman. 2013. Serum oxidative biomarkers in Holstein cows as influenced by late pregnancy. Proceedings of 2nd International Dairy Science Park, Nov 18-20, University of Agriculture, Peshawar, Pakistan. Page: 78.
- 17) Rahman, F. M.S. Qureshi and **RU Khan**. Effect of soyabean based extenders on sperm parameters of Holstein-Friesian bull during liquid storage at 4°C. Proceedings of 2nd International Dairy Science Park, Nov 18-20, University of Agriculture, Peshawar, Pakistan. Page: 123.
- 18) Qureshi, M.S., Hafiz-ur-Rahman and **R.U. Khan**. 2013. Influence of dietary zinc on semen traits and seminal plasma antioxidant enzymes and trace minerals of Beetal bucks. Proceedings of 2nd International Dairy Science Park, Nov 18-20, University of Agriculture, Peshawar, Pakistan. Page: 124.
- 19) Zia-ur-Rahman and **Rifat Ullah Khan**. 2012. Effect of probiotics, proteins and vitamins on seminal plasma minerals of male broiler breeders after zinc induced molting. 3rd Mediterranean Poultry Summit and 6th International Poultry Conference, Alexadria, 26-29 March. Abstract No. 10283
- 20) Zia-ur-Rahman and **Rifat Ullah Khan**. 2012. Effect of probiotics, proteins and vitamins on semen traits in male broiler breeders. 3rd Mediterranean Poultry Summit and 6th International Poultry Conference, Alexadria, 26-29 March. Abstract No. 10284
- 21) **Rifat Ullah Khan**. 2012. *Thymus vulgaris*: alternative to antibiotics in poultry feed. 3rd Mediterranean Poultry Summit and 6th International Poultry Conference, Alexadria, 26-

29 March. Abstract No. 10058

- 22) Naz, Shabana, Shahnaz Akhtar Rana, Naureen Rana and **Rifat Ullah Khan**. 2011. Effect of feeding brodifacoum and food energy inhibitor on heart and liver enzymes of house rats (*Rattus rattus*). 31st Pakistan Congress of Zoology (International). Azad Jamu and Kashmir Univeristy, 21-23 April
- 23) Naz, Shabana, Shahnaz Akhtar Rana, Naureen Rana and **Rifat Ullah Khan**. 2011. Seasonal effects on the measurement dynamics of different body part or organs of house rats (*Rattus rattus*) in Faisalabad, Pakistan. 31st Pakistan Congress of Zoology (International). Azad Jamu and Kashmir Univeristy, 21-23 April
- 24) Zia-ur-Rahman, Shaukat Ali Shaukat, Abdul Majeed Cheema, **Rifat Ullah Khan** and Mansur Abdullah. 2009. Immunohistochemistry of adenohypophysis in lactating and non lactating camels (*Camelus dromedarius*). 35th All Pakistan Science Conference. Karachi University Journal of Science 37: 1 & 2.
- 25) Zia-ur-Rahman, Nuzhat Sharif, Naheed Abbas, Asma Lodhi, **Rifat Ullah Khan** and Haseeb Anwar. 2009. Effect of ginger (*Zingiber officinale*) fortified feed on metabolic profiles, minerals and thyroid hormones in albino rats. 19th All Pakistan Food Science Conference. PCSIR Laboratories Complex, Lahore, Pakistan.
- 26) Zia-ur-Rahman, Mahwish Naseer, Naheed Abbas, Asma Lodhi, Haseeb Anwar and **Rifat Ullah Khan**. 2009. Effect of green onion fortified feed on the physiochemical, enzymes, hormones and mineral profile of the albino rats. 19th All Pakistan Food Science Conference. PCSIR Laboratories Complex, Lahore, Pakistan.
- 27) Muhammad Tariq Javed, Farooq Ahmad Farooqi and **Rifat Ullah Khan**. 2009. Incidence of bovine tuberculosis and its effect on haematological profile in dairy buffaloes. 6th Asian Buffalo Conference, Lahore, Pakistan. 27-30 October. Page No: 70.
- 28) Zia-ur-Rahman; Haseeb Anwar; Anwar-ul-Haq Anwar; Abdul Malik and **Rifat Ullah Khan**. 2009. Dynamics of cystic fluid, serum biochemical, amino acid and mineral profile in *Echinococcus granulosus* affected camels. The second conference of the international Society of Camelid Research and Development. Djerba, Tunisia: 11th -14th March. Abstract No: 25.
- 29) Mureed Abbas, Zia-ur-Rahman, Haseeb Anwar, Abdul Malik, Muhammad Ajmal Jalvi and **Rifat Ullah Khan**. 2009. Relationship study of mineral status with reference to soil, water, serum, urine and faeces at different physiological stages in camels (*Camelus dromedarius*). The second conference of the international Society of Camelid Research and Development. Djerba, Tunisia: 11th -14th March. Abstract No: 138.
- 30) Zia-ur-Rahman, **Rifat Ullah Khan**, Abdul Malik, Muhammad Ajmal Jalvi, Haseeb Anwar and Mureed Abaas. 2009. Biomarkers of health and minerals status in pregnant camels (*Camelus dromedarius*). The second conference of the international Society of Camelid Research and Development. Djerba, Tunisia: 11th -14th March. Abstract No: 146.
- 31) **Rifat Ullah Khan**, F.R. Durrani, Niela Chand, S. M. Suhail, Zia-ur-Rahman and Hasib Anwar. 2009. Effect of feed added *Cannabis sativa* on the growth performance of broiler chicks. 5th World's Poultry Conference, Tabba, Egypt: 10-13 March. Abstract No: 20.
- 32) Muhammad Javed, **Rifat Ullah Khan**, Fazil-Raziq Durrani, Abdul Hafiz, Zia-ur-Rahman and Hasib Anwar. 2009. Impact of aqueous extract of mixture of locally available plants on growth performance of broiler chicks. 5th World's Poultry Science Conference, Tabba, Egypt 10-13 March. Abstract No. 34.

- 33) Rahman ZU, Khaliq T, Hassan IJ, Ijaz A, Malik A, **Ullah R.** (2008) Plasma haematochemical profile of recombinant bST injected Nilli Ravi buffalos. WCAP-2008. Abactract No. 5268.
- 34) Zia-ur-Rahman, Ayesha Bibi, Nighat Bhatti, Naheed Abbas, **Rifat Ullah Khan** & Hasbee Anwar. 2008. Metabolic, minerals and thyroid hormones profile in normal and hemophilic patients. 18th National Chemistry Conference, Lahore, Pakistan. 25-27th Feberuary. Page No. 76.
- 35) Zia-ur-Rahman, Rahat Amin, Nighat Bhatti, Naheed Abbas, **Rifat Ullah Khan** & Hasbee Anwar. 2008. Metabolic, minerals and thyroid hormones profile of young male rate fed marijuana. 18th National Chemistry Conference, Lahore, Pakistan. 25-27th Feberuary. Page No. 105.
- 36) Zia-ur-Rahman, Rahat Amin, Nighat Bhatti, Naheed Abbas & **Rifat Ullah Khan**. 2008. Plasma Biochemical Profile of Burned Human Patients.18th National Chemistry Conference, Lahore, Pakistan. 25-27th Feberuary. Page No. 106.
- 37) Zia-ur-Rahman, Rahat Amin, Nighat Bhatti, Naheed Abbas & **Rifat Ullah Khan**. 2008. Metabolic, minerals and thyroid hormones profile of young rats fed opium. 18th National Chemistry Conference, Lahore, Pakistan. 25-27th Feberuary. Page No. 107.

Books published

- 1) Sania Subhan Qureshi, Rifat Ullah Khan, M. Subhan Qureshi, Sher Bahadar Khan, Shakoor Ahmad and Mithat Direk. 2017. Proceedings of the 4th International Dairy Science Conference and Industrial Exhibition on Dairy Science Park, November 1-5, 2017. Selcuk University, Konya, Turkey.
- 2) Muhammad Subhan Qureshi, Zahoor Ul Hassan, Shakoor Ahamd, Rifat Ullah Khan, Asad Sultan, Muhammad Tahir (sr) and Rashid Aman (editors). In: Proceedings of the 2nd International Science Park. Organized by Faculty of Animal Husbandry & Veterinary Sciences, The University of Agriculture, Peshawar-25120, Pakistan. Nov, 18-20, 2013. ISBN: 978-969-422-001-7
- 3) **Khan, R.U.**, S. Naz and V. Tufarelli. 2012. Hemp seeds and broiler performance. LAP Lambert Academic Publishing, Germany. (ISBN 978-3-659-11926-2)

Book chapters

- 1) Chatha, A.M.M., Naz, S., Naz, S., **R.U. Khan**, Nawaz, A. (2023). Heavy Metal Pollution in Water from Anthropogenic and Natural Activities and the Remediation Strategies. In: Ahmad, M.I., Mahamood, M., Javed, M., Alhewairini, S.S. (eds) Toxicology and Human Health . Springer, Singapore. https://doi.org/10.1007/978-981-99-2193-5_2
- 2) Naz, S., Iqbal, S., **R.U. Khan**, Chatha, A.M.M., Naz, S. (2023). Aquaculture Fish Responses Towards Temperature Stress: A Critical Review. In: Ahmad, M.I., Mahamood, M., Javed, M., Alhewairini, S.S. (eds) Toxicology and Human Health . Springer, Singapore. https://doi.org/10.1007/978-981-99-2193-5_5

International Scientific Achievement

- a. Enlisted in 2% global scientists in all disciplines in 2020 compiled by Standford University, California, USA.
- b. Enlisted in 2% global scientists in all disciplines in 2021 compiled by Standford University, California, USA.
- c. Enlisted in 2% global scientists in all disciplines in 2022 compiled by Standford University, California, USA.
- d. Enlisted in 2% global scientists in all disciplines in 2023 compiled by Standford University, California, USA.
- e. Ranked No 1, for academic publications in the area of animal and veterinary sciences by research.com

Scholarship won

HEC 5000 Indigenous PhD Scholarship Batch IV 2007-2011
 HEC Merit Talent Scholarship (M.Sc Hons) 2005

Awards

- f. Research Productivity Award-2012 (Pakistan Council for Science and Technology Islamabad, Pakistan)
- g. Research Productivity Award-2013 (Pakistan Council for Science and Technology Islamabad, Pakistan)
- h. Research Productivity Award-2015 (Pakistan Council for Science and Technology Islamabad, Pakistan)
- i. Research Productivity Award-2017 (Pakistan Council for Science and Technology Islamabad, Pakistan)

Projects Won as principal investigator

| Title of project | Amount (Rs) | Funding agency | Year of completion |
|---|--------------------|---|---------------------------|
| Reproductive characteristics of Beetal male goats as influence by the dietary supplementation of alpha-tocopherol | 0.5 Million | Higher Education Commission (HEC) of Pakistan | 2015 |
| Green synthesis of selenium nanoparticles and their impact on meat and egg type birds | 2.2 millions | Pakistan Science Foundation | Ongoing |

Projects as Co-principal investigator

| Title of project | Amount (Rs) | Funding agency | Year of completion |
|------------------------------|--------------------|-----------------------|---------------------------|
| Utilization of maggots as an | 2.00 million | Pakistan Science | Completed |

| | | | |
|---|---------------|---|-------------|
| alternative animal origin protein on the production performance of meat and egg-type birds | | Foundation | |
| Towards antibiotic free treatment: Role of Hydroximic acids in bacterial and fungal pathogens of commercial Poultry Birds | 4.77 Millions | Higher Education Commission of Pakistan | In progress |

Students supervised as a major supervisor (M.Phil)

| Serial No. | Name of student | Research topic | Year of completion |
|-------------------|------------------------|---|---------------------------|
| 1 | Farhad Shoukat | Association of blood calcium with luteal activity and somatic cell count in postpartum achai and cross bred cows | 2020 |
| 2. | Fasiha Kamal | Effect of organic selenium on blood progesterone, metabolites, milk yield and service period of jersey cows | 2019 |
| 3. | Hammad Ullah | Effect of Yeast based selenium on postpartum corpus luteal activity, enegery balance and milk yield in Achai dairy cows | 2018 |
| 4. | Ibrar Muhammad Khan | Comparison of fresh and frozen semen quality in pure and cross bred cattle. | 2014 |
| 5. | Muhammad Adnan Khan | Effect of different equilibration time on post thaw croyopreseved semen quality of cattle and buffalo breeds | 2014 |
| 6. | Hamid-ur-Rahman | Relationship of age and breed with libido of cattle bull | 2014 |

Students supervised as a co-supervisor

PhD students

| Name of student | Department | Research topic | Year of completion |
|------------------------|-------------------|--|---------------------------|
| Zia-ur-Rahman | Poultry Science | Effect of high ambient temperature on performance, immunity and antioxidant status in four broiler strains | 2017 |
| Momin Khan | Poultry Science | Assessment of maggot meal as substitute of soybean meal in the ration of meat and egg type birds | 2019 |

| | | | |
|--------------|----------------------------------|--|------|
| Abdul Jabbar | Animal Nutrition | Investigation of enzymes and alpha-D3 on the performance, bone quality and nutrients digestibility of broiler chickens | 2020 |
| Najmul Saqib | Livestock, Breeding and Genetics | Stress factors effecting sustainable dairy farming and their improvement strategies for district Peshawar | 2022 |
| Waqas Alam | Poultry Science | Evaluation of growth performance, stress, immunity status and production performance of broiler breeders under cage versus floor systems | 2022 |

MSc (Hons)

| Name of student | Department | Research topic | Year of completion |
|----------------------|----------------------|---|--------------------|
| Hafiz AbdulMajid | Livestock Management | Reproductive characteristics of Beetal male goats as influence by the dietary supplementation of alpha-tocopherol | 2013 |
| Hafiz ur Rahman | Livestock Management | Effect of zinc on semen parameters quality of male bucks | 2013 |
| Shams-ul-Hayat | Poultry Science | Comparison of natural and artificial insemination in Japanese quails (<i>Coturnix japonica</i>) | 2013 |
| Muhammad Shoib Khan | Poultry Science | Effect of stocking density on performance and oxidative stress and behaviour of broilers | 2013 |
| Momin Khan | Poultry Science | Effect of various semen extenders on quail eggs fertility hatchability | 2013 |
| Tauqeer Ahsan | Animal Nutrition | Use of hemp seed (<i>Cannabis sativa</i>) cake as a protein source for broiler chicken | 2014 |
| Muhammad Ali Shah | Animal Nutrition | Effect if dietary probiotic on growth performance, meat quality and intestinal microflora in broiler chicks | 2014 |
| Muamber shah | Livestock Management | Effect of vitamin C on semen production of different breeds of cattle | 2014 |
| Muhammad Tahseen | Animal Nutrition | Additive effect of <i>Nigella sativa</i> and ginger on the performance of broiler chicks | 2014 |
| Mudeer Gul | Livestock | Effect of different feeding times on the performance of HF dairy cattle during summer at Harichand | 2014 |
| Muhammad Najmu Saqib | Livestock | Association of changes in post-partum metabolism an stress parameters with resumption of ovarian cyclicity in exotic dairy cattle | 2014 |
| Alam Zeb | Poultry Science | Silk worm pupae as potential alternative and cheap source of protein supplementation in broiler | 2015 |
| Safiullah | Poultry Science | Effect of natural antioxidants on the performance of summer stressed broiler | 2018 |
| Munib Ahmad | Poultry Science | Effect of milk thistle on the performance and blood biochemicals of summer stressed broiler | 2018 |
| Nazish Aman | IBGE | Comparative sensitivity and efficacy of organic acid against opportunistic | 2018 |

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|------------------|------------------|--|------|
| | | bacteria in toe web infection | |
| Faisal Amin | Animal Nutrition | Performance and nutrients utilization of broiler chicks fed diets supplemented with combination of phytase and protease | 2018 |
| Sardar Hussain | Animal Nutrition | The effects of 1-alpha hydroxycholecalciferol, phtase and protease supplementation on the performance, bone quality and nutrients utilization of market weight chickens. | 2018 |
| Zahir Ullah | Poultry Science | Comparative efficacy of organic and inorganic zinc on the performance, intestinal histology and lipid per oxidation in broilers | 2018 |
| AAmir Khan | Animal Nutrition | Investigating the efficiency of Moringa oleifera leaf extract on the carcass quality, immunity, blood metabolites and lipid peroxidation in broiler chickens | 2019 |
| Rafiullah | Animal Nutrition | Estimation of Aflatoxin B1 different feed samples collected from District Peshawar, Mardan and Malakand | 2019 |
| Maryam Shah | IBGE | Determining the presence of iron regulating genes mutations in Beta thelesemia major patients of KP, Pakistan | 2019 |
| Muhammad Mushtaq | Animal Nutrition | Effect of Potenmic on immunity, antioxidant status and nutrient digestibility of broiler chicks | 2019 |
| Madeeha Ihsan | IBGE | Determining the associated genes polymorphism with diabetic nephropathy in diabetes mellitus type 2 patients of KPK population | 2020 |
| Mamoona Jehanzeb | IBGE | Genetic association of gene polymorphism with diabetic retinopathy | 2020 |
| Naseeb Ullah | Animal Nutrition | Association of metabolic response with somatic cell count in Achai and crossbred cows during transition period | 2020 |
| Hassan Amin | Animal Nutrition | Association of trace minerals with oxidative stress during transition period in Achai and Crossbred dairy cows | 2020 |
| Mah Noor | Poultry Science | Effect of dried Tamrind pulp | 2020 |

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|--------------------------|------------------|---|------|
| | | supplementation on performance, oxidative stress and immune response in summer stressed broiler | |
| Maham Shah | Poultry Science | Effect of ginger and onion supplementation on oxidative stress and immunity in heat stressed broiler | 2020 |
| Muhammad Israr | Poultry Science | Effect of organic zinc and grape seed powder on the performance of summer stressed broilers | 2020 |
| Mehreen Dost Muhammad | Poultry Science | Exploring the efficacy of dried tomato pomace and zinc in broilers | 2021 |
| Syeda Adia Fatima | Poultry Science | Effect of fennel seed as an antioxidant and immune stimulant in broiler | 2021 |
| Saad Ullah | Poultry Science | Effect of dietary inclusion of grape seeds extract (GSE) on egg quality, production performance and antioxidant activities at peak production in laying hens | 2021 |
| Shah Faisal Hassni | Poultry Science | Effect of supplementation of feed with grape seeds extract (GSE) on performance, nutrient digestibility and blood profile at early production period in laying hens | 2021 |
| Anwar Shah | Theriogenology | | 2021 |
| Najam ul Saqib | Poultry Science | Effect of dietary graded level of dried orange (<i>Citrus sinensis</i>) pulp on growth performance, liver functions and nutrient utilization by broiler at day 35 | |
| Fahad Gul | Animal Nutrition | Relation of blood calcium with milk production, oxidative stress and reproductive performance of post-partum Achai and crossbred cows | 2021 |
| Faiza Hayat | IBGE | Investigating the association of RANKL and OPG genes mutation with progression of breast cancer to bone metastasis | 2021 |
| Shehla Khanum | IBGE | Extracellular matrix degrading genes MMP8 and MMP9 polymorphisms association with breast cancer risk in women of Khyber Pakhtunkhwa | 2021 |
| Hidayat Ullah | Animal Nutrition | Comparative study on mycotoxin-Aflatoxin B1 and nutrients profile of poultry and cattle feeds collected from different farms of district Buner, | 2021 |

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| | | Mardan and Charsada | |
| Yumna Khan | IBGE | Determining the association of polymorphism in BRCA1, BRCA2 and TP53 genes with breast cancer risk in Khyber Pakhtunkhwa | 2021 |
| Wafa Sombal | IBGE | Risk association of HER1 (R497K) HER2 (1655V) polymorphisms with breast cancer | 2022 |
| Murad Ali | Animal Nutrition | Dietary supplementation of black garlic on the performance, gut morphology, digestibility and antioxidant status of broiler chicks | 2022 |
| Haseeb Raza | Animal Nutrition | Evaluation of dry dates as corn replacement on the growth performance, gut morphology and nutrient digestibility in broiler chicks | 2022 |
| Shah Faisal Hassani | Poultry Science | Effect of supplementation of feed with grape seed extract (gse) on performance, nutrient digestibility and blood profile at early production period in laying hens | 2022 |
| Saad Ullah | Poultry Science | Effect of dietary inclusion of grape seed extract (gse) on egg quality, production performance and anti-oxidant activity at peak production in laying hens | 2022 |
| Muhammad Muddasir | Animal Nutrition | Investigating the growth performance, meat quality, nutrients digestibility, gut morphology and blood metabolites in finisher phase of broiler chicks supplemented with dietary emulsifier lysophospholipids | 2022 |
| Muhammad Hamayun | Livestock | Comparative study of Jersey, Achai and crossbred of Jersey and Achai at cattle breeding and dairy farm Harichand | 2023 |
| Darwish Khan | Poultry Science | Effect of supplementation of diet with Azolla pinnat meal on growth performance, carcass characteristics and intestinal histomorphology in Japanese quails | 2023 |
| Shah Zeb | Poultry Science | Effect of super worm oil supplementation on growth performance of broilers | 2023 |
| Asad Ullah | IBGE | Association of human epidermal | 2023 |

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|-------------------|------------------|---|------|
| | | growth factor receptor (HER1 and 2) gene polymorphisms with colorectal cancer risk in khyber pakhtunkhwa | |
| Qamber Piral | Poultry Science | Effect of supplementation of pomegranate peel powder on growth performance, lesion score and histopathology of coccidian infected broilers. | 2023 |
| Israr Ahmad | Poultry Science | Effect of dietary inclusion of lemon peel powder on performance, cecal lesion scoring and histopathology in broilers challenged with coccidiosis | 2023 |
| Ateeb Shoukat | Animal Nutrition | Determining the utilization of extruded rapeseed meal in poultry | 2023 |
| Abdul Samad Basit | Animal Nutrition | Impact of nutritional protease addition on the growth performance, carcass characteristics nutrients digestibility, caecal microbiota and immune status of broiler chicks | 2023 |
| Hamza Khan | IBGE | Validating the association of breast cancer gene (BRCA1 and BRCA2) polymorphisms in familial cases of breast cancer patients | 2023 |
| Zahoor Elahi | IBGE | The association of HLADRB1 alleles with rheumatoid arthritis in population of Khyber Pukhtunkhwa, Pakistan | 2023 |
| Asad Ullah | IBGE | Association of human epidermal growth factor (HER1 and 2) gene polymorphism with colorectal cancer risk in khyberpukhunkhwa | 2023 |
| Ateeb Shoukat | Animal Nutrition | Determining the utilization of extruded rapeseed meal in broiler chikcens | 2023 |
| Zahoor Ilahi | IBGE | The association of HLA DRB1 alleles with rhemuatioid arthritis in population of Khyber Pakhtunkhwa, Pakistan | 2023 |
| Atif ur Rehman | Poultry Science | Impact of dietary inclusion of zinc methionine (Zn-Met) on oxidative status of quails raised in open sided house | 2023 |

Reviewer of Journals (Impact factor journals only)

Reproduction in Domestic Animals; Toxicology Reports; Poultry Science; Animal Science; World's Poultry Science; Archives of Animal Breeding; African Journal of Biotechnology;

International Journal of Biometeorology; Vitamin and Trace Element; Reproduction, Fertility and Development; African Journal of Ecology; Agriculture Research Journal, Acta Agriculturae Scandinavica, Section B - Plant Soil Science, Czech Journal of Animal Science, Animal Production Science, Journal of the Science of Food and Agriculture, Annals of Animal Science, Journal of Applied Animal Research, Avian Biology Research, Journal of Animal Physiology and Animal Nutrition, European Poultry Science, International Journal of Vitamin and Nutrition Research, Biomed Research International, The Philippine Agricultural Scientist, Archivos de Medicina Veterinaria, BMC Veterinary Research, Acta histochemica, Journal of Applied Poultry Research, Poultry Science Japan, Animal Production Science, Springer Plus, Revista Brasileira de Zootecnia, Critical Review in Food Science and Nutrition, Journal of Animal and Plant Science (JAPS), Food Science and Nutrition, Journal of Veterinary Medicine, Acta Tropica, Critical Review in Microbiology, British Poultry Science, South African Journal of Animal Science, Environmental Science and Pollution Research, Anais da Academia Brasileira de Ciéncia, Frontier in Veterinary Science, Journal of Functional Food, Agriculture,

Member of the Editorial board of the Journals (Impact factor only)

- Guest Editor of “Sustainability” special issue (2021-2023), Nanobiotechnology: Animal Production, Health and Welfare
- Guest editor for the topic “Edible Insects as Feed and Food: Opportunities and Challenges” for the journals (Agriculture, Animals, Dietics, Foods and Insects) https://www.mdpi.com/topics/Edible_Insects_Feed_Food
- Guest editor for the topic The Impact of Climate Change on Livestock: Mitigation Strategies and Solutions in Journal Science Progress <https://journals.sagepub.com/page/sci/special-collection/impact-of-climate-change-on-livestock?pbEditor=true>
- Guest editor for the topic “Ante-mortem handling and slaughtering stress in broilers: Effects and remedies <https://www.frontiersin.org/research-topics/46494/ante-mortem-handling-and-slaughtering-in-broilers-effects-and-remedies>
- Associate Editor, International Journal of Poultry Science
- Associate Editor Sarhad Journal of Agriculture
- Asian Council of Scientific Editors

External Examiner for Viva Voce

| Year | Student name | Degree | Department | Host university |
|-------------|---------------------|---------------|------------------------|---|
| 2012 | Sobia Kanwal | M.Phil | Wildlife and Fisheries | G.C. College University, Faisalabad, Pakistan |

| | | | | |
|------|----------------------------|--------|---------------------------|--|
| 2013 | Rana Muhammad Arshad | M.Phil | Wildlife and Fisheries | G.C. College University, Faisalabad, Pakistan |
| 2020 | Qura-Tul-Ain | M.Sc | Department of Zoology | G.C. College University, Faisalabad, Pakistan |
| 2020 | Sarfraz Nawaz | M.Sc | Department of Zoology | G.C. College University, Faisalabad, Pakistan |

EMPLOYMENT RECORD

| Scale of Pay | Designation | Dates | | Name and address of Employer |
|--------------|---------------------------|-----------|------------|--|
| | | From | To | |
| BS-17 | Veterinary Officer | 3-3-2007 | 19-08-2007 | Livestock and Dairy Development Peshawar, Pakistan |
| BS-19 | Assistant Professor (TTS) | 31-1-2012 | 19-05-2020 | The University of Agriculture, Peshawar, Pakistan |
| BS-20 | Associate Professor (TTS) | 20-5-2020 | Upto date | The University of Agriculture, Peshawar, Pakistan |

Courses Taught

Undergraduate (DVM)

1. Endocrinology and Neuromuscular Physiology (Theory and Practical)
2. Digestive Physiology and Lactation (Theory and Practical)
3. Cardiovascular, Respiratory and Renal Physiology (Theory and Practical)
4. General Veterinary Medicine (Theory and Practical)
5. Epidemiology and Veterinary Public Health (Theory and Practical)
6. Biochemistry (Theory and Practical)
7. Vet. Physiology-II
8. Vet. Physiology-I

Postgraduate

1. Artificial Insemination (Theory and Practical)

2. Physiological Biochemistry of Preservation of Semen (Theory and Practical)
3. Rodent Management (Theory and Practical)
4. Avian Reproduction (Theory and Practical)

Workshops Attended

1. One day provincial orientation and consultative workshop ‘Livestock for Life’ Project Relief International 8th March, 2012.
2. One day workshop on “Bringing innovations in food value chain sustainable development in KP and FATA” 29th March, 2017. Jointly organized by Dairy Science Park and The University of Agriculture Peshawar, Pakistan
3. Two days workshop on “Conventional and molecular diagnosis of *Clostridium perfringens* for the control of enterotoxaemia in small ruminants. 2-3 May 2019. Organized by Department of Animal Health, The University of Agriculture Peshawar, Pakistan

Symposiums attended

1. One day Symposium Livestock production- National and global perspective organized by Faculty of Veterinary Science and Faculty of Animal Husbandry, On March 17, 2011, 50 years of Advancing Agricultural Technology and Training Golden Jubilee Celebrations Year 2011, University of Agriculture, Faisalabad.

Trainings

1. Ensuring Training Effectiveness, 2012, jointly conducted by (Higher Education Commission of Pakistan) and The University of Agriculture, Peshawar.
2. Two days training on Election 2018

Seminar Attended

1. One day seminar Novel corona virus emergence: Threats and preventions, 27th Feb, 2020. College of Veterinary Sciences, The University of Agriculture, Peshawar, Pakistan

Membership of Societies

International Society of Camelid Research and Development 2008 up to date (ISOCARD)
Australian Society of Animal Production 2011 up to date
International Society of Biometerology 2014-2015
Scientific & Technical Research Association Life Time

Guest speaker (invited speaker)

Novel feed additives improving poultry production and health, bioactive principles and beneficial applications: The trends and advances. 8 Nov, 2017, Ergis University, Turkey

Administrative Assignments

- Seminar in charge of college of veterinary sciences
- Member board of studies of CVS
- Member DTRC of Dr. Ijaz Ahmad, Livestock Department
- Member Digital Library, HEC, Islamabad
- Developed 16 post-graduate courses for Physiology (approved from board of studies)
- Organizer, one-day seminar on “Novel Corona Emergence, Threats and Preventions” held on 27th February, 2020, at The University of Agriculture, Peshawar
- Organized, “Hand-on workshop of artificial insemination in goat” on 24th October 2023 at college of veterinary sciences, UAP
- Organized 2-days National Hands on training workshop “The art of Taxidermy”. 20th and 21st March, 2023. Government College University, Faisalabad, Pakistan
- Attended workshop of 4th international conference of PNQAHE and annual general meeting. March 3-5, 2024. Islamabad