

Abdul Quddus

Researcher's Curriculum Vitae

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1. Personal details and date of the CV

Surname: Quddus

First name(s): Abdul

Researcher IDs: LinkedIn and ResearchGate profiles listed above.

Research profile relevant to the call

PhD researcher in animal reproduction and reproductive toxicology, with a Master's thesis on cadmium-induced ovarian and uterine toxicity and an ongoing doctoral project on neonicotinoid (clothianidin) exposure, corpus luteum/ovarian function and melatonin-mediated protection in a pregnant mouse model. This background sits directly on the mechanistic toxicology and female reproductive biology axis that EIRIS addresses, and provides a solid foundation in endocrine-sensitive reproductive endpoints, oxidative stress and molecular pathway interpretation —

Relevant strengths : hands-on wet-lab research, experimental design, data handling and statistics, qPCR/RT-qPCR, RNA-seq interpretation, IHC/IF, ELISA/RIA, oxidative stress assays, H&E histology, Western blot, basic mammalian cell culture, and scientific review/manuscript writing. Principal development areas for this position, which I am motivated to build through the training EIRIS provides: human endometrial cell models, LC-MS/MS proteomics/secretomics, systematic evidence mapping with language-model-assisted literature curation, and network/pathway/ontology analysis.

2. Degrees

2024–present — Doctoral studies (PhD), Animal Genetics and Reproduction, College of Animal Science and Technology, Nanjing Agricultural University, Nanjing, China. Degree ongoing; supervisor Prof. Dagan Mao. Doctoral research on clothianidin-induced ovarian/luteal dysfunction and melatonin-mediated protection in a pregnant mouse model. Status : First Year of the study

2019–2021 — Master of Veterinary Science (MVSc), Universiti Putra Malaysia, Serdang, Malaysia. Thesis: “Effects of cadmium toxicity on ovarian and uterine functions of Sprague-Dawley rats and the therapeutic role of Edible Bird's Nest.” Supervisor: Dr Nurhusien Yimer Degu. CGPA: 3.51/4.00.

2011–2016 — Doctor of Veterinary Medicine (DVM), Lasbela University of Agriculture, Water and Marine Sciences (LUAWMS), Uthal, Balochistan, Pakistan. Silver Medalist, 2nd position overall; CGPA: 3.71/4.00.

3. Other education and expertise

Experimental and laboratory expertise

- Animal reproductive toxicology models: cadmium, lead, indomethacin, heat stress, clothianidin and antioxidant/rescue interventions.
- Female reproductive endpoints: corpus luteum structure/function, ovarian histology, uterine histomorphology, embryo implantation and endocrine function.
- Methods: H&E histology, IHC/IF, TUNEL, qPCR/RT-qPCR, RNA-seq interpretation, ELISA/RIA, oxidative stress assays, Western blot, tissue processing, microscopy and basic TEM.
- Molecular biology and cell work: molecular endpoint selection, gene/protein expression interpretation, and basic mammalian cell culture experience.

Data, literature and computational readiness

- Data handling and statistics: experimental design, group comparisons, graph preparation and biological interpretation using R, SPSS and GraphPad Prism.
- Evidence synthesis: first/co-author experience in narrative and mechanistic review articles, manuscript drafting, reference management and structured literature interpretation; peer reviewer for Veterinary Medicine and Science (Wiley).

- Position-specific development interest: systematic evidence mapping, language-model-assisted literature curation, ontologies and adverse outcome pathways, omics/pathway/network analysis, and LC-MS/MS proteomic/secretomic interpretation.

4. Language skills

Urdu: Native.

English: Fluent; IELTS overall 7.0 (Listening 8.5, Reading 7.0, Writing 6.0, Speaking 6.0).

Chinese: Basic; HSK2 level, ongoing study.

5. Current employment

2024–present — PhD researcher / doctoral student, College of Animal Science and Technology, Nanjing Agricultural University, Nanjing, China. Research career stage: I (doctoral student). Focus: neonicotinoid pesticide exposure, ovarian and luteal function, early pregnancy endpoints and melatonin-mediated protection.

2022–present — Lecturer / faculty member, Department of Animal Genetics and Physiology, Lasbela University of Agriculture, Water and Marine Sciences (LUAWMS), Pakistan. Currently on PhD study leave. Teaching and mentoring in animal genetics/physiology, reproductive biology and environmental toxicology.

6. Previous work experience

2023–2024 — Director, Student Affairs, LUAWMS, Pakistan. Led student welfare, leadership development, academic counselling, youth festivals, mental health sessions and student–faculty dialogue initiatives.

2020–2021 — Research Assistant, Universiti Putra Malaysia, Malaysia. Assisted reproductive toxicology research, laboratory work, undergraduate mentoring and conference abstract preparation.

2017–2022 — Research Officer, Ministry of National Food Security & Research, Islamabad, Pakistan. Contributed to livestock health/productivity projects and awareness activities for rural communities and women livestock entrepreneurs.

2015–2016 — President, Veterinary Student Society, LUAWMS, Pakistan. Organised student leadership and One Health awareness activities.

7. Career breaks

No career breaks. Current doctoral study leave from LUAWMS is listed under current employment (Section 5).

8. Research funding and grants

2024–present — Chinese Government Scholarship (CSC), Nanjing Agricultural University, China.

2019–2021 — Higher Education Commission (HEC) Pakistan, fully funded scholarship for MVSc studies, Universiti Putra Malaysia.

2011–2016 — University merit scholarships during DVM studies, LUAWMS.

9. Research output

13 peer-reviewed journal articles (listed below) plus 2 conference contributions. Major themes: reproductive toxicology, endocrine disruption, female reproductive function, embryo implantation, luteal biology, environmental contaminants, oxidative stress and antioxidant interventions.

Peer-reviewed journal articles (reverse chronological order)

1. Tariq, M., Tharwat, M., Batool, S., Quddus, A., Safdar, M., & Alharbi, Y. M. (2026). Integrated hormonal, metabolic, and epigenetic regulation of corpus luteum function: insights into steroidogenesis, angiogenesis, and regression. *Frontiers in Endocrinology*, 17, 1812524. doi:10.3389/fendo.2026.1812524
2. Tariq, M., Quddus, A., Victor, K. K. A. S., Beshah, K. H., Yan, Y., & Mao, D. (2026). Resveratrol attenuates heat stress-induced luteal injury through modulation of oxidative stress and cytokine-chemokine inflammatory networks in pregnant mice. *Antioxidants*, 15(4), 489. doi:10.3390/antiox15040489

3. Zhao, J., Zhou, X., Yu, H., Quddus, A., Liu, X., & Mao, D. (2026). Effects of dexamethasone on luteal steroidogenesis, cell apoptosis and PKA/CREB/PPARG pathway in rats. *Reproductive Toxicology*, 140, 109166. doi:10.1016/j.reprotox.2026.109166
4. Tariq, M., Quddus, A., Beshah, K. H., & Mao, D. (2025). Resveratrol's therapeutic role in heat stress-induced mitochondria and ER dysfunction in animal reproductive health: A review. *Animal Reproduction Science*, 283, 108044. doi:10.1016/j.anireprosci.2025.108044
5. Beshah, K. H., Xie, J., Tariq, M., Quddus, A., & Mao, D. (2025). Genetic and non-genetic factors influencing lambskin traits: A review. *Animal Genetics*, 56(6), e70061. doi:10.1111/age.70061
6. Amir, M., Yimer, N., Hiew, M., Yusoff, M. S. M., Babatunde, S. M., & Quddus, A. (2025). Edible Bird's Nest (EBN) ameliorates the effects of indomethacin (IMC)-induced embryo implantation dysfunction in rats. *Biology*, 14(2), 159. doi:10.3390/biology14020159
7. Ullah, S., Quddus, A., Wei, Q. W., Ennab, W., Mustafa, S., Sun, J. H., Malyar, R. M., Baseer, A., Mao, D., & Shi, F. (2024). Assessment of spermatogenesis in camels via seminiferous tubule staging and testosterone profiling. *Asian Pacific Journal of Reproduction*, 13(3), 133–142. doi:10.4103/apjr.apjr_156_23
8. Ullah, S., Ennab, W., Wei, Q., Wang, C., Quddus, A., Mustafa, S., Hadi, T., Mao, D., & Shi, F. (2023). Impact of cadmium and lead exposure on camel testicular function: Environmental contamination and reproductive health. *Animals*, 13(14), 2302. doi:10.3390/ani13142302
9. Amir, M., Yimer, N., Hiew, M., Yusoff, S. M., Mohammed, B. H., & Quddus, A. (2023). Effect of indomethacin on embryo implantation and histomorphology of uterus, ovary, kidney, and liver of rats. *Saudi Journal of Biological Sciences*, 30(12), 103837. doi:10.1016/j.sjbs.2023.103837
10. Islam, M. S., Yimer, N., Haron, A. W., Jesse, F. F. A., Hiew, M. W. H., Kamalludin, M. H., Fitri, W. N., Kaka, U., & Quddus, A. (2022). Growth performance and sexual maturity in Malaysian Kedah-Kelantan and Kedah-Kelantan x Brangus bulls. *Advances in Animal and Veterinary Sciences*, 10(2), 397–404. doi:10.17582/journal.aavs/2022/10.2.397.404
11. Quddus, A., Yimer, N., Jesse, F. F. A., Basit, M. A., Amir, M., & Islam, M. S. (2021). Edible bird's nest protects histomorphology of rat's uterus against cadmium (Cd) toxicity through a reduction of Cd deposition and enhanced antioxidant activity. *Saudi Journal of Biological Sciences*, 28(12), 7068–7076. doi:10.1016/j.sjbs.2021.08.012
12. Quddus, A., Yimer, N., Abdul Basit, M., Khan, S., & Amir, M. (2021). Review of antioxidant-rich natural dietary products as protective and therapeutic factors against cadmium toxicity in living organisms. *Pertanika Journal of Tropical Agricultural Science*, 44(1), 83–105. doi:10.47836/pjtas.44.1.05
13. Quddus, A., Yimer, N., Jesse, F. F. A., Noordin, M. M., Hiew, M. W. H., Basit, M. A., Amir, M., Islam, M. S., & Kaka, U. (2021). Protective effect of edible bird's nest on ovaries of cycling female rats subjected to cadmium toxicity. *Journal of Animal Health and Production*, 9(4), 496–503. doi:10.17582/journal.jahp/2021/9.4.496.503

Conference papers / abstracts

Amir, M., Yimer, N., Hiew, M. W. H., Yusoff, M. S. M., Quddus, A., & Mohammed, B. H. (2022). Edible Birds Nest (EBN) therapy against indomethacin (IMC)-induced reproductive dysfunction in rats. 41st Malaysian Society of Animal Production Annual Conference and 6th ASEAN Regional Conference on Animal Production, Georgetown, Penang, Malaysia, 26–28 October 2022.

Quddus, A., & Yimer, N. (2019). Ameliorating effect of Edible Bird's Nest (EBN) on ovarian function of cycling female rats subjected to cadmium toxicity. 31st Veterinary Association Malaysia Conference.

Methods, software, materials and tools

- Routine tools: R, SPSS, GraphPad Prism, reference management and scientific manuscript preparation.
- Research materials/outputs: histology datasets, qPCR/RNA-seq interpretation tables, oxidative stress/hormonal assay summaries and publication figures for reproductive toxicology projects.
- Patents/inventions: none.

10. Research supervision and leadership experience

- Supervised/co-supervised undergraduate and postgraduate research students at LUAWMS; two completed student theses supervised.

- Mentored students in reproductive biology, environmental toxicology, animal physiology and academic writing.
- Coordinated student-facing academic and welfare initiatives as Director, Student Affairs, LUAWMS (2023–2024).

11. Teaching merits

- Teaching areas: Animal Genetics and Physiology, Reproductive Biology, Reproductive Physiology, Theriogenology Clinic and Environmental Toxicology.
- Teaching-related activities: practical demonstrations, research project guidance, student mentoring, academic counselling and development of teaching/support material.
- Educational outreach: guided students on scholarship applications, career planning and academic writing.

12. Awards and honours

- 2019–2021 — Higher Education Commission (HEC) Pakistan fully funded scholarship for MVSc studies at Universiti Putra Malaysia.
- 2019 — Certificate of Merit, UPM International Student Council.
- 2016 — Silver Medal, LUAWMS Convocation; DVM 2nd position overall.
- 2016 — Certificate of Appreciation, Pakistan Veterinary Medical Association.
- Multiple years — University merit scholarships during DVM studies.

13. Other key academic merits

- Peer reviewer, Veterinary Medicine and Science (Wiley).
- President, Veterinary Student Society, LUAWMS (2015–2016).
- Participant/organiser in student leadership, One Health awareness, cultural exchange and volunteer programmes.
- Editorial-board, dissertation-opponent and formal funding-review roles: not held to date.

14. Scientific and societal impact

- Research impact orientation: reproductive toxicology research addressing environmental contaminants, endocrine disruption, fertility, early pregnancy and animal/human health relevance.
- Science communication: publication record in reproductive toxicology, animal reproduction, oxidative stress and reproductive health; conference presentation experience; peer review activity for an international journal.
- Societal engagement: girls' education support initiative in Quetta, Balochistan; outreach to rural livestock communities and women livestock entrepreneurs; student mental well-being and scholarship guidance.
- International collaboration: academic experience across Pakistan, Malaysia and China; ongoing work within a multidisciplinary reproductive biology/toxicology research group.

15. Other merits

- Community leadership: active organiser within Nanjing's international academic and cultural community, supporting Pakistan–China cooperation through university and community networks.
- References: available on request.