

Curriculum Vitae



Personal Information

Date of Birth: 13/10/1995

Contact: +92-311-8527957

Email: muhammad.mushahid@uaf.edu.pk

Address: University of Agriculture Faisalabad,
Constituent College, Toba Tek Singh, Pakistan

M. Mushahid (Lecturer, Animal Breeding and Genetics)

Ph.D Animal Breeding and Genetics (Thesis Submitted) (UAF, Pakistan)

M.Sc. (Hons.) Animal Breeding and Genetics (UAF, Pakistan)

DVM (Doctor of Veterinary Medicine) (PMAS UAAR, Pakistan)

ACADEMIC QUALIFICATION(s)

| DEGREE/Certificate | Institute | Passing Year | CGPA |
|--|--|--------------|-----------|
| Ph.D. Animal Breeding and Genetics | University of Agriculture Faisalabad, Pakistan | 2020-till | 3.85 |
| M.Sc. (Hons.) Animal Breeding and Genetics | University of Agriculture Faisalabad, Pakistan | 2020 | 3.83 |
| Doctor of Veterinary Medicine (DVM) | PMAS-UAAR, Pakistan | 2018 | 3.28/4.00 |
| Intermediate | Fauji Foundation Inter College Khushab, Pakistan | 2013 | 902/1100 |
| Matric | MPHS Mitha Tiwana, Khushab, Pakistan | 2010 | 957/1050 |

TEACHING (COURSES)

| Degree | Course Code | Course Title | Credits |
|--------------------------------|-------------|--|---------|
| B.Sc. (Hons.) Poultry Science | ABG-402 | Introductory Population Genetics | 3(2-1) |
| | ABG-501 | Applied Poultry Breeding | 2(1-1) |
| | ABG-502 | Biotechnology in Poultry Breeding | 2(2-0) |
| | PSci-502 | Poultry Breeding Practices | 2(1-1) |
| | ABG-601 | Conservation and Development of Indigenous Poultry Resources | 2(1-1) |
| BS Animal Science | ABG-401 | Introductory Population Genetics | 3(2-1) |
| BS Zoology | ABG-510 | General Genetics | 4(3-1) |
| | ABG-619 | Bioinformatics | 3(2-1) |
| | BIOINFO-403 | Introduction to Bioinformatics | 3(2-1) |
| M.Sc. (Hons.) Animal Nutrition | ABG-712 | Bioinformatics for Animal Sciences | 3(2-1) |

ASSIGNMENTS

Current

Class Advisor (Spring 2026):

BS Chemistry 4th Semester
BS Chemistry 8th Semester (Analytical & Organic) (Internship and Project Reports)
BS Information Technology 8th Semester (Internship and Project Reports)

Synopsis Scrutiny Committee (Member):

MPhil Chemistry

Club Co-Incharge: Young Development Club
Completed

Class Advisor (Winter 2025-26):
BS Chemistry 3rd Semester
BS Chemistry 7th Semester (Analytical & Organic)
BS Information Technology 7th Semester

Synopsis Scrutiny Committee (Member): M.Sc. (Hons.) Animal Nutrition
Security Incharge (Short term)
Library Incharge (Short term)

INTERESTS

- Genomic selection of farm animals for production traits
- Bioinformatics analysis of important gene families in farm animals
- Metagenomics of farm animals
- Phenotypic data recording/Statistical modelling and analysis

PERSONAL SKILLS/ABILITIES

- Farm animal management and handling skills
- Data Science (R software, ASREML, Plink, Wombat, GCTA, GAPIT etc.)
- Bioinformatics tools (Bioedit, MEGA, CDD analysis, Motifs analysis, Multiple align show, Tbtools, ClustalW)
- Statistical data analysis

ACADEMIC PROJECTS

- Molecular characterization of Nili-Ravi buffalo for Milk production traits under project Establishment of National Center for Livestock Breeding Genetics and Genomics (NCLBG&G) (Ph.D. Thesis)
- Molecular characterization of HSP70 gene in Nili-Ravi buffaloes of Pakistan (M.Sc. Hons. thesis)
- Bioinformatics analysis of important gene families of Buffalo (NCLBG&G).

EXPERIENCE

Lecturer, Animal Breeding and Genetics, UAF CC Toba Tek Singh, Pakistan

- 25-07-2024 to present

Teaching Assistantship, University of Agriculture, Faisalabad

- 14-09-2021 to 24-01-2022 (4 month 10 days)
- 11-02-2022 to 13-06-2022 (4 month 2 days)
- 13-09-2022 to 12-01-2023 (4 month)

PUBLICATIONS

- Hassan, F. U., Ashraf, N., Arain, M. A., **Mushahid, M.**, Safdar, M., Saif-ur-Rehman, M., & Behan, A. A. (2025). Heat stress in riverine buffaloes: regulatory mechanism, physiological changes, production and reproductive performance, and mitigation strategies. International Journal of Biometeorology, 69(10), 2567-2587.
- Aziz, U., Rehman, A., Waqar, M., Khan, N., Yousaf, M. H., & **Mushahid, M.** (2025). Dynamic Multi Component Genetic Merit Index A Novel Statistical Approach for Livestock Breeding.
- Aziz, Umar, Abdul Rehman, Nauman Khan, M. Khuzema Niaz, Javed Zafar, Fasih Ur Rehman,

Muhammad Mushahid, and Muhammad Hanzalah Yousaf. "Evolutionary and Functional Integration of LCORL-NCAPG Locus with Myostatin Pathway in Broiler Chickens." *Journal of World's Poultry Science* 4, no. 3 (2025): 70-77.

- Rehman, A., Khan, N., Niaz, M.K., Shah, A.M., Zafar, J., Rehman, F.U., Ahmad, N., Bekana, K., **Mushahid, M.**, Talal, M. and Aziz, U., 2025. Novel Genes and Genetic Variants Associated with Production Traits in Australorp Chickens. *Journal of World's Poultry Science*, 4(3), pp.50-62.
- Aziz, Umar, Abdul Rehman, Muhammad Hanzalah Yousaf, Fasih Ur Rehman, **Muhammad Mushahid**, Nauman Khan, Jiayuan Li, Xugan Wang, Hanbing Yan, and Xiaopeng An. "Interrogating the Milk Yield Genome: A Comparative Whole Genome Association Study in Guanzhong and Beetal Goats." *Small Animal Advances* 4, no. 3 (2025): 11-19.
- Aziz, Umar, Abdul Rehman, **Muhammad Mushahid**, Fasih Ur Rehman, Nauman Khan, Muhammad Hanzalah Yousaf, M. Khuzema Niaz, Muhammad Arslan Akbar, Muhammad Rizwan, and Saleh Ahmad. "Comparative Genomic Analysis on Novel Genes Associated with Egg Production and Disease Resistance in Layer Hens." *Journal of World's Poultry Science* 4, no. 3 (2025): 30-42.
- Tariq, M., Abbas, M. H., Hussain, T., Ashraf, M., Abbas, G., Khalid, F., & **Mushahid, M.** (2024). Biotechnological perspectives on oxytocin use in dairy management: effects on productive and reproductive health of dairy animals in peri-urban, Faisalabad, Punjab. *Pakistan Journal of Science*, 76(4)
- Hassan, F. U., Deng, T., Rehman, M. S. U., Rehman, Z. U., Sarfraz, S., **Mushahid, M.**, & Rehman, S. U. (2023). Genome-wide identification and evolutionary analysis of the FGF gene family in buffalo. *Journal of Biomolecular Structure and Dynamics*, 1-12.
- Rehman, M. S. U., Hassan, F. U., Rehman, Z. U., Hussain, H. N., Shahid, M. A., **Mushahid, M.**, & Shokrollahi, B. (2022). Comparative Genomic Characterization of Relaxin Peptide Family in Cattle and Buffalo. *BioMed Research International*, 2022.

TRAINING AND CERTIFICATES

- Two and half month internship in Commercial corporate sector Dairy farm Nishat Dairies (Health department, Breeding department, Milk parlor, calf Section, Dairy section, Heifers management and laboratory work).
- One month internship in Islamabad Feeds Rawat, Islamabad (Raw material unloading and quality check, Feed storage, Feed formulation, Feed formation process and laboratory analysis)
- One month internship in Civil Veterinary Hospital Mitha Tiwana, Khushab.
- Five day training workshop "Phenotyping Characterization of Livestock Breeds of Pakistan" Under project Establishment of National Center for Livestock Breeding Genetics and Genomics (NCLBG&G).
- Five day training workshop "Genetic Prediction in Livestock Breeding" Under project Establishment of National Center for Livestock Breeding Genetics and Genomics (NCLBG&G).
- Five day training workshop "Animal Performance Recording, Data Collection and Analysis for genetic Improvement" under project Establishment of National Center for Livestock Breeding Genetics and Genomics (NCLBG&G).
- Abstract submission and oral presentation in applied zoological society (3rd International Conference on applied zoology 2020).
- Attended one day International Consultative workshop on goat breeding in Pakistan in PMAS-UAAR.
- Attended one day webinar on Maximizing genetic potential with embryo transfer and IVF technology training webinar.
- Participated in two days training workshop on "Techniques and management of Artificial Insemination in poultry".
- Attended one day seminar on "Opportunity and challenges in milk and meat sector".
- Multiple Egg day participation certificates.