

MUHAMMAD ARSLAN AKBAR
🏠 Gaggoo, District Vehari, Punjab-Pakistan.
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Area of Interest

My field is Animal Breeding, Genetics and Genomics and interested in study of desired traits at the molecular level. I can efficiently use statistical software like GenStat, SPSS, SAS, ASREML, Wombat, and R Studio to calculate genetic parameters and genomic data analysis.

Teaching/Professional Job Experience

2018 to date Lecturer

8 Years

- Cholistan University of Veterinary and Animal Sciences (CUVAS), Bahawalpur, Pakistan
- Taught courses in Animal Breeding and Genetics at the undergraduate level
- Developed animal breeding and genetics laboratory

2017-2018 Veterinary Officer

02 Years

- Punjab Livestock & Dairy Development Department, Pakistan.
- Breed improvement project of local cattle, buffalos, sheep, and goats.
- Involved in animal health measures and prevention (Disease control activities)

2016-2017 Teaching Assistant

>01 Year

- Department of Livestock Production, University of Veterinary and Animal Sciences, Lahore, Pakistan

Research Experience

2014-2016 Junior Researcher

02 Year

- Department of Livestock Production, University of Veterinary and Animal Sciences, Lahore, Pakistan

2013-2014

>01 Year

- Production and field experience in “BIG BIRD POULTRY BREEDERS (PVT) LTD”.

Education

MAJOR	INSTITUTE	CGPA/%age	YEAR
M Phil (Animal Breeding & Genetics)	University of Veterinary and Animal Sciences Lahore-Pakistan	3.84/4.00	2014-2016
DVM (Doctor of Veterinary Medicine)	Bahauddin Zakariya University Multan-Pakistan	3.74/4.00	2009-2014
F.Sc. (Pre-Medical)	City College Science, Multan	76.4%	2009
Matriculation	Govt. Higher Secondary School Gaggoo, Vehari-Pakistan	76.2%	2006

Awards

Silver Medal

2016 (M Phil) University of Veterinary and Animal Sciences Lahore-Pakistan

Merit Certificate

2014 Doctor of Veterinary Medicine (DVM) Bahauddin Zakariya University Multan-Pakistan

Scientific Writing Experience

Thesis Title: Morphological structure of Thalli sheep through principal component analysis of body measurements

Administrative Experience

- Head of University Central Store
- Examination Incharge
- Class Coordinator of BS Animal Sciences
- Member of the time table committee

JCR-Higher Education Commission (HEC) Recognized Research Publications

- 2026 Yuyang Tian, Ziming Zhang, Quratulain Hanif, Fuqiang Li, Jicai Zhang, **Akbar Muhammad Arslan**, Chuzhao Lei, Bizhi Huang & Ningbo Chen. A missense mutation in the bovine NPBWR2 gene introgressed from *Bos javanicus* into Chinese indicine cattle. *Animal Biotechnology*. 37 (1) 2633924.
<https://doi.org/10.1080/10495398.2026.2633924>
- 2026 Javaid, A., Hussain, S., Raja, I. H., **Akbar, M. A.**, et al. Effects of Partial Replacement of Corn with Corn Starch on Growth Performance and Gut Morphology of Broiler Chickens. *Jammu Kashmir Journal of Agriculture*, 6(3), 119–126. <https://doi.org/10.56810/jkjagri.006.03.0405>
- 2025 Shafeeq Ur Rehman, Waqas Ashraf, Muhammad Moazam Jalees, Tariq Abbas, Humera Nazir, Jahanzaib, **Muhammad Arslan Akbar**, et al., A Meta-Analysis of the Preventive Potential of Mucosal Vaccines for Foot and Mouth Disease. *Journal of Microbiological Sciences*. 4(2), 212-221.
<https://doi.org/10.38211/jms.2025.04.110>
- 2025 Umar Aziz, Abdul Rehman, Muhammad Mushahid, Fasih Ur Rehman, Nauman Khan, Muhammad Hanzalah Yousaf, M Khuzema Niaz, **Muhammad Arslan Akbar**, Muhammad Rizwan, 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(3): 1-13.
<https://doi.org/10.58803/jwps.v4i3.79>
- 2024 Sidra Fida, Asma Akram, Amjad Farooq, Abdul Waheed, Asim Faraz, Syeda Maryam Hussain, Zeeshan Muhammad Iqbal, **Muhammad Arslan Akbar**, Muhammad Rizwan, Chanda Liaqat, Sadia Sanaullah, Anam Zohra and Nasir Ali Tauqir. Analysis of the Interrelationships between Various Body Dimensions in Young Lambs. *Journal of Agriculture and Food*. 5(1): 69-75.
<https://doi.org/10.52587/JAF050105>

- 2024 Salma Bessalah, Asim Faraz, Ayman Balla Mustafa, Syeda Maryam Hussain, Shamsaldeen IbrahimSaeed, Chanda Liaqat, Waqas Ashraf, Zeeshan Muhammad Iqbal, **Muhammad Arslan Akbar** and Mohamed Hammadi. Antibacterial activity of camel colostrum against pathogenic strain of Escherichia coli F17-associated with calf diarrhea. Open Veterinary Journal. 14(11): 2883-2892. <https://doi.org/10.5455/ovj.2024.v14.i11.17>
- 2024 **Muhammad Arslan Akbar**, Khalid Javed, Asim Faraz, Abdul Waheed, Ecevit Eydurhan and Muhammad Tariq. Phenotypic Characterization and Weight Estimation of Young Thalli Sheep Through Multivariate Traits. Pakistan Journal of Zoology. 56(4): 1711-1716. <https://dx.doi.org/10.17582/journal.pjz/20200608090631>
- 2023 Asim Faraz, Nasir Ali Tauqir, **Muhammad Arslan Akbar**, Syeda Maryam Hussain, Zeeshan Muhammad Iqbal, Sannan Nazir, Muhammad Umar7, Irsa Kanwal, Muhammad Furqan Ilyas, Muhammad Rizwan, Sadia Sanaullah, Chanda Liaqat and Arooj Fatima. Portrayal of Productive Parameters of Marecha Camel Calves in Desert Ecosystem. Journal of Agriculture and Food, 4 (2): 94-101. <https://doi.org/10.52587/JAF040207>
- 2023 Asim Faraz, Amal AlKharusi, Nasir Ali Tauqir, Muhammad Shahid Nabeel, Syeda Maryam Hussain, Abdul Waheed, **Muhammad Arslan Akbar**. Improving Productive and Reproductive Parameters of Thalli Sheep by Modern Husbandry Practices in Farming System. Punjab University Journal of Zoology. 38(1): 53-57. <https://dx.doi.org/10.17582/journal.pujz/2023.38.1.53.57>
- 2023 Asim Faraz, Hafiz Muhammad Ishaq, Nasir Ali Tauqir, Abdul Waheed, **Muhammad Arslan Akbar**, Talat Bilal Yasoob, Maaz Rehman, Amal AlKharusi, Ayman Balla Mustafa and Muhammad Shahid Nabeel. Haematological and hematochemical evaluation of Marecha camel reared under farming system. Journal of Agriculture and Food. 3 (2): 1-10. <https://doi.org/10.52587/JAF030201>
- 2023 Asim Faraz, Nasir Ali Tauqir, Hafiz Muhammad Ishaq, **Muhammad Arslan Akbar**, Muhammad Abubakar Sufyan, Abdul Waheed, Muhammad Usman Saleem, Muhammad Shahid Nabeel, Morteza Bitaraf Sani, Amal AlKharusi, Samira Jebahi and Ayman Balla Mustafa. Milk Profile of Marecha Camel (Camelus dromedarius) Affected by Stage of Lactation and Pregnancy. Punjab University Journal of Zoology. 38(1): 43-51. <https://dx.doi.org/10.17582/journal.pujz/2023.38.1.43.51>
- 2023 Maria Khan, Asim Faraz, Amjad Farooq, Abdul Waheed, Riffat Parveen, Nasir Ali Tauqir, **Muhammad Arslan Akbar**, Talat Bilal Yasoob, Maaz Rehman, Syeda Maryam Hussain, Muhammad Furqan Ilyas, Muhammad Rizwan, Chanda Liaqat, Sadia Sanaullah. Non-Genetic Factors Affecting Birth Weight in Thalli Sheep. Journal of Agriculture and Food, 4(1): 29-35. <https://doi.org/10.52587/JAF040104>
- 2022 **Muhammad Arslan Akbar**, Khalid Javed, Asim Faraz and Abdul Waheed. Principal Component Analysis of Morphometric Traits Explain the Morphological Structure of Thalli Sheep. Pakistan Journal of Zoology. vol. 54(1): 207-212. <https://dx.doi.org/10.17582/journal.pjz/20200220060257>
- 2022 A. Faraz, N. A. Tauqir, H. M. Ishaq, S. M. Hussain, M. M. A. Hamid, A. Waheed, R. H. Mirza, I. S. Sheikh, **M. A. Akbar**, R.M. Bilal, and M. S. Nabeel. Hematological profile of Marecha camel (Camelus Dromedarius) reared under semi-intensive management system. Journal of Animal & Plant Sciences. 32(6): 1590-1597. <https://doi.org/10.36899/JAPS.2022.6.0568>

- 2022 Asim Faraz, Muhammad Yaqoob, Nasir Ali Tauqir, Hafiz Muhammad Ishaq, Ayman Balla Mustafa, Amir Ismail, **Muhammad Arslan Akbar**, Abdul Waheed and Muhammad Shahid Nabeel. Utilization of Hormonal Biomarkers for Early Pregnancy Diagnosis in Marecha Camel under Semi-Intensive Management System. Punjab University Journal of Zoology 37(1): 29-34. <https://dx.doi.org/10.17582/journal.pujz/2022.37.1.77.83>
- 2022 Asim Faraz, Nasir Ali Tauqir, Abdul Waheed, Hafiz Muhammad Ishaq, Syeda Maryam Hussain, Riaz Hussain Mirza, Rana Muhammad Bilal, **Muhammad Arslan Akbar** and Muhammad Shahid Nabeel. Haematological and Biochemical Profile of Extensive Kept Male Barela (Camelus dromedarius) Camel during Breeding and Non-Breeding Season. Sarhad Journal of Agriculture. 38(4): 1184-1188. <https://dx.doi.org/10.17582/journal.sja/2022/38.4.1184.1188>
- 2022 Asim Faraz, Bernard Faye, Cem Tirink, Ayman Balla Mustafa, Amal AlKharusi, Morteza Bitaraf Sani, Nasir Ali Tauqir, **Muhammad Arslan Akbar**, Muhammad Usman Saleem, Rana Muhammad Bilal, Abdul Waheed, and Muhammad Shahid Nabeel. Forced Mating an Efficient Tool in Camel Production to Reduce the Age at Puberty and Calving Interval in Dromedary She-Camel (Camelus dromedarius). Punjab University Journal of Zoology 37(1): 35-40. <https://dx.doi.org/10.17582/journal.pujz/2022.37.1.35.40>
- 2020 **Muhammad Arslan Akbar**, Asim Faraz, Abdul Waheed. Therapeutic Features of the Camel Milk-A Review. International Journal of Camel Science, 2020, 2: 35-46.

Book Chapters

- 2026 Asim Faraz, Faizan Saleem, Hafiz Muhammad Ishaq, Syeda Maryam Hussain, Imtiaz Hussain Raja, Muhammad Rizwan, Irsa Kanwal, Zeeshan Muhammad Iqbal, Syed Sami Haider, Sannan Nazir, **Muhammad Arslan Akbar**, et al. Meat Composition and Nutrition. Chap 16: Cultured Meat: Apple Academic Press.
- 2024 Asim Faraz, Faizan Saleem, **Muhammad Arslan Akbar**, Hafiz Muhammad Ishaq, Syeda Maryam Hussain, Zeeshan Muhammad Iqbal et al. Organic-Based Nanomaterials in Food Packaging: Safety and Regulatory Issues of Organic Nanomaterial. 209-225. Springer, Singapore.
- 2023 Faraz, A., Tauqir, N. A., Ishaq, H. M., Hussain, S. M., Ismail, A., Waheed, A., and **Akbar, M. A.** Role of Livestock for Disaster Risk Reduction. In Disaster Risk Reduction in Agriculture. 429-443. Singapore: Springer Nature Singapore.
- 2023 Amjad Islam Aqib, **Muhammad Arslan Akbar**, Khazeena Atta, Maheen Murtaza, Sana Zia; Genome to Phenome: Improving Animal Health, Production, and Well-Being, Recent Trends In Livestock Innovative Technologies Recent Advances in Biotechnology. 7: 126.
- 2023 Muhammad Tariq, Muhammad Ashraf, **Muhammad Arslan Akbar**, Sannan Nazir; Animal Body, Basics of Animal Production Science. 2: 16-22.
- 2023 Abdul Waheed, **Muhammad Arslan Akbar**, M. Jamshed Khan, H.M. Ishaq; Animal Genetic Resources of Pakistan, Basics of Animal Production Science. 3: 23-66.
- 2022 **Muhammad Arslan Akbar**, Male and Female Reproductive Organs, Handbook on Artificial Insemination in Large and Small Ruminants. 3: 10-16.

- 2022 Asim Faraz, Nasir Ali Tauqir, Hafiz Muhammad Ishaq, **Muhammad Arslan Akbar**, Riaz Hussain Mirza, Abu Bakar Sufyan and Saba Rashid. Camel Production Profile and Role in Food Security. 30: 216-220.

Conference Abstract

- 2024 Asma Akram, Amjad Farooq, Samrah Masud, Abdul Waheed, Asim Faraz, Syeda Maryam Hussain, Zeeshan Muhammad Iqbal, **Muhammad Arslan Akbar**, et al. Assessment of non-genetic factor affecting milk production in goats. International Congress on Domestic Animal Breeding, Genetics and Husbandry – 2024, Antalya, Turkey. September 23-25, 2024.
- 2024 **Muhammad Arslan Akbar**, Faiz-Ul-Hassan, Zeeshan Muhammad Iqbal, Asim Faraz, Abdul Waheed, Muhammad Arslan, Sannan Nazir, Mubasher Rauf and Muhammad Fahad. Cultured Meat: The Future Food of The World. The 8th International Conference on "Global Halal Food Industry: Insights from Pakistan,". Bahauddin Zakariya University, Multan-Pakistan. April 24-25.
- 2024 Asim Faraz, Faizan Saleem, Abdul Waheed, **Muhammad Arslan Akbar et al.** Halal Meat. The 8th International Conference on "Global Halal Food Industry: Insights from Pakistan,". Bahauddin Zakariya University, Multan-Pakistan. April 24-25.
- 2024 Asim Faraz, Faizan Saleem, Abdul Waheed, **Muhammad Arslan Akbar et al.** The Global Halal Meat Market. The 8th International Conference on "Global Halal Food Industry: Insights from Pakistan,". Bahauddin Zakariya University, Multan-Pakistan. April 24-25.
- 2024 Zeeshan Muhammad Iqbal, Mubasher Rauf, Faiz-Ul-Hassan, Asim Faraz, Muhammad Mazhar Ayaz, **Muhammad Arslan Akbar et al.** Rabbit Meat: A Quick Way to Fulfill Meat Demand and Supply Gap. The 8th International Conference on "Global Halal Food Industry: Insights from Pakistan,". Bahauddin Zakariya University, Multan-Pakistan. April 24-25.
- 2024 Zeeshan Muhammad Iqbal, Muhammad Fiaz, Faiz-Ul-Hassan, Asim Faraz, Muhammad Mazhar Ayaz, **Muhammad Arslan Akbar et al.** Traceable Mutton Production: An Innovative Farm-To-Fork Meat production System. The 8th International Conference on "Global Halal Food Industry: Insights from Pakistan,". Bahauddin Zakariya University, Multan-Pakistan. April 24-25.
- 2023 Asim Faraz, Hafiz Muhammad Ishaq, Usama Mujahid, **Muhammad Arslan Akbar**, AttiqahMujahid. A Potential Therapeutic Role and Solitary Composition of Camel milk: A Meta-Analysis Study. All Pakistan; 32nd Conference of Pakistan Society of Food Scientists & Technologist. Food Crisis in Pakistan; Opportunities & Solutions. Bahauddin Zakariya University, Multan-Pakistan. March, 8-9.

Extension Articles

- 2021 Dr. Asim Faraz, Saba Rashid, Dr. Abdul Waheed and **Muhammad Arslan Akbar**. Effect of micronutrients on dairy animals. 6(7): 3.
- 2021 Dr. Asim Faraz, Dr. Abdul Waheed and **Muhammad Arslan Akbar**. Effect of micronutrients on dairy animals. 6(4): 3.

- 2021 **Muhammad Arslan Akbar.** Effect of environmental stress in beef animals. Farmer Reformer. 6(2): 3.
- 2021 **Muhammad Arslan Akbar.** Colostrum - a nature's gift for a newborn. Farmer Reformer. 4(1): 3.
- 2016 **Muhammad Arslan Akbar.** Sheep and their contagious diseases. Farmer Reformer. 3(4): 3.
- 2016 **Muhammad Arslan Akbar.** Our Gorgeous Livestock and Strategies for its Improvement. Farmer Reformer. 7(5): 7.

Organized Training/Workshops

- 2024 **Guest Trainer** on **"One day hands-on training for Biostatistics"** at CUVAS Bahawalpur. Dated: Feb 14, 2024.
- 2023 Hands-On one-week Scientific Training workshop Titled **"Data analysis with R"**, Organized by CUVAS Bahawalpur. Dated: July 17-21, 2023.
- 2022 Organized a training series on **"Technical Writings"** at CUVAS Bahawalpur from 25 February 2022 to 25 March 2022.
- 2022 Organized 12-week training course in Animal Breeding/Quantitative Livestock Breeding, Genetics and Genomics, PMAS Arid Agriculture University Rawalpindi at CUVAS Bahawalpur from 04-April 2022 to 23-September 2022.
- 2021 Organized **"5-day Genetic Workshop"** Integrating Genetic Improvement in Livestock Production for Improvement Productivity and Profitability. CUVAS Bahawalpur and 11-15 Oct 2021.
- 2021 One-day Seminar and presented on **"Improving Sahiwal Genetics-Pedigree and Performance Recording"**. At Jahangirabad cattle farm (Watto Farm) Kacha Khu Dist. Khanewal 6th March 2021.
- 2019 Organized a special lecture on the eve of World DNA Day entitled **"How much DNA results are reliable in science"**. CUVAS Bahawalpur and 25th April 2019.

Training/Workshops and Conferences Attended

- 2025 The 5th World Conference of Dairy and Sheep Industry Development & Rural Vitalization Forum. October 27-31. 1/F, Haitang Long County Resort Hotel, Baoji, China
- 2025 The 3rd" International Conference on Pet Stem Cells. November, 6-9. Yangling, China
- 2025 Delivered an On-line lecture/talk with the title **"Beyond the SNP: Integrating Structural Variants into the Next Generation of Cattle Genomics and Breeding"** during the event of National Conference titled "Livestock Genetics & Genomics Conference (LGGC-2025) on November 19 &20, 2025. The Conference was organized by National Center for Livestock Breeding Genetics and Genomics (NCLBG&G) at PMAS-Arid Agriculture University, Rawalpindi.
- 2024 The 4th World Conference of Dairy Goat and Sheep Industry Development & Rural Revitalization Forum. November 14-16. Baoji, China
- 2024 Three-day Training Workshop on **"Qualitative Research and Data Analysis using Nvivo"** to be held at Hailey College of Commerce, University of the

- Punjab, New Campus, Lahore organized by Punjab Higher Education Commission. Dated: January 10-12, 2024.
- 2024** One-day scientific talk on **"The Fertility in Estrous Synchronized Sheep and Goats through Laparoscopic Artificial Insemination"** organized at CUVAS Bahawalpur. Dated: March 11, 2024.
- 2023** One day Seminar entitles as **"Droplet Digital PCR"** Organized by BIO-RAD. Dated: June 09, 2023.
- 2023** One day Seminar entitles as **"Innovation in Biochemistry, Veterinary Medicine & Pharmacology"** organized by CUVAS Bahawalpur. Dated: February 06-07, 2023.
- 2022** Hands-On Scientific Training Titled **"Genetic Prediction in Livestock Breeding"**, Organized by Nation Center for Livestock Breeding, Genetics and Genomics (NCLBG&G), PMAS-Arid Agriculture University Rawalpindi. Dated: March 14-18, 2022.
- 2022** Hands-on training on **CRISPR/CAS Mediated Genome Editing**, Organized by University of Agriculture, Faisalabad, Pakistan. Dated: February 21-25, 2022,
- 2021** 5-day Genetic Workshop **"Integrating Genetic Improvement in Livestock Production for Improvement Productivity and Profitability"** at CUVAS Bahawalpur. Dated: October 11-15, 2021.
- 2021** International e-conference Vaccine(s) against Arthropode-borne diseases at CUVAS Bahawalpur. Dated: July 09, 2021.
- 2021** International e-conference Listeria monocytogenes from the detecting to deep typing: present and new perspectives at CUVAS Bahawalpur. Dated: July 07, 2021.
- 2021** Enhancing Veterinary Diagnostic & Research Laboratories Capabilities in Pakistan Pathology Lab CUVAS Bahawalpur. Dated: June 21-25, 2021.
- 2021** Phenotypic characterization of Livestock Breeds of Pakistan PMAS-Arid Agriculture University Rawalpindi. Dated: June 21-25, 2021.
- 2021** Use of Technological Tools for Scientific Research Writing at Islamia University Bahawalpur. Dated: April 06-08, 2021.
- 2021** Sindh Livestock Expo at Hyderabad, Sindh. Dated: March 13-15, 2021.
- 2020** Faculty Orientation Training Workshop for Cholistan University of Veterinary and Animal Sciences (CUVAS) Bahawalpur" by Punjab Higher Education Department. Dated: November 02-06, 2020.
- 2020** Ethnobiological Perspective of Indonesian Chicken (from History to Genetics). Dated: July 20, 2020.
- 2019** Application of SAS Statistical Techniques in Animal Production and Veterinary Sciences CUVAS, Bahawalpur. Dated: May 02 May 2019.
- 2019** Introduction to Endnote CUVAS, Bahawalpur. Dated: April 29, 2019.
- 2019** In-Service Competency Enhancement Training for Young University Faculty CUVAS, Bahawalpur. Dated: April 25-26 2019.

References

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