

Curriculum Vitae



1. **Name** Tariq Ali (Ph.D., M.Sc., D.V.M., B.Sc.)

2. **Personal Data**

Office address: Centre of Microbiology & Biotechnology,
Veterinary Research Institute, Peshawar, Pakistan
Work phone: +92-91-9210218-19
Cell phone: +92-333-9964879
E-mail: tariq.phd.18@gmail.com
Date/place of birth: 10th March, 1978
Khyber Pakhtunkhwa, Pakistan
Citizenship: Pakistan
Country visited: UAE, Taiwan, Spain, China
Health status: Excellent, without any allergy and abnormality

3. **Employment**

Center of Microbiology and Biotechnology, Veterinary Research Institute, Peshawar,
Government of Pakistan (August, 2004 to present)

Job responsibilities: Research designing and implementation, publishing research
articles, undergraduate/postgraduate students' supervision, etc.

4. **Education**

2018 **PhD** in Microbiology, College of Veterinary Medicine, China Agricultural University, Beijing
2012 **M. Sc (Hons)** Livestock Management, University of Agriculture, Peshawar, Pakistan.
2002 **DVM** (Doctor of Veterinary Medicine), Uni. Of Agriculture, Faisalabad, Pakistan
1999 **B.Sc** (Bio-Sciences), University of Peshawar, Pakistan.

5. **Dissertation Titles**

- PhD dissertation- *Characterization of extended-spectrum beta-lactamase (ESBL)-producing Escherichia coli isolated from bovine mastitis*
- Master dissertation- *Effect of Managemental practice on incidence of mastitis in Nili Ravi buffaloes*

6. Awards and Honours

- *Excellent graduate student Award 2018*, College of Veterinary Medicine, China Agricultural University, Beijing, during the year 2018.
- *Outstanding International Student Award 2017*, awarded by China Scholarship Council, Ministry of Education, P.R China, during the year 2017.
- *Best Performance Award* during the year 2010, awarded by Livestock Research and Development Department, Government of Khyber Pakhtunkhwa, Pakistan.
- *Distinction certificates* achieved during High school, Secondary high school and college (Bachelor) during 1994, 1996 and 1999.

7. Research interests

The overall goal of my research is focused on the epidemiology, especially the molecular epidemiology, of various bacterial and viral diseases, particularly of public health importance.

Secondly, to ensure a safe and economical food of animal origin, with a reduced risks to transmission of zoonotic and other infectious diseases from milk to the general public.

Based on the above goals, I have two main research interests:

- **Bacteriology**, molecular epidemiology of pathogenic bacteria, characterizations of bacterial pathogens, virulence factors, antigenic and immunogenic characterizations of bacteria.
- **Antimicrobial** resistance in bacteria, mechanisms of antimicrobial resistance, multidrug resistance, antimicrobial resistance conferring genes characterization like ESBL and carbapenemase encoding genes, etc. I will capitalize on the latest molecular techniques such as whole genome sequence of different bacteria to study deep insights into genetic make-up of the resistant bacteria and their characteristics.

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8. Publications in Peer Review journals

a. List of articles under review/accepted

1. Ali, T., *et al.*, 2020. Characteristics and clonal diversity of ESBL-producing *Escherichia coli* isolated from buffaloes with clinical mastitis in Pakistan. **Microbial Drug Resistance (SCI, IF = 2.56)**.
2. Khan, F., *et al.*, 2020. Hematological and serum biochemical alterations associated with bovine leukemia virus (BLV) in cattle. **Pakistan Journal of Zoology (SCI, IF = 0.790)**.

3. Nashmal, A., *et al.*, 2020. Phylogenetic genotyping, virulence genes and antibiotic susceptibility of *Escherichia coli* isolates recovered from cases of bovine mastitis. **Journal of Dairy Research** (SCI, IF = 1.36).

b. List of published papers as first- & corresponding- author

1. Ali, T., *et al.*, 2020. Co-occurrence of plasmid-mediated colistin resistance (*mcr-1*) and extended-Spectrum β -Lactamase encoding genes in *Escherichia coli* from bovine mastitic milk in China. **Microbial Drug Resistance** (SCI, IF = 2.56). doi: 10.1089/mdr.2019.0333.
2. Khan *et al.*, 2019. Seroprevalence of bovine leukemia virus (BLV) in cattle from the north west of Pakistan. **Pakistan Veterinary Journal** (SCI, IF = 1.36). DOI:10.29261/pakvetj/2019.103.
3. Ali, T., *et al.*, 2018 (equal authorship review article). Genomic and functional diversity and mechanism of resistance by extended spectrum beta-lactamases. **Biomedical Research International** (SCI, IF= 2.476). doi: 10.1155/2018/9519718.
4. Ali, T., *et al.*, 2018. Influence of different weaning ages on growth performance of Achai cross Jersey calves. **Pakistan Journal of Zoology** (SCI, IF=0.790). DOI: 10.17582/journal.pjz/2018.50.6.2159.2163.
5. Khattak *et al.*, 2018. Comparative performance of Jersey sired calves from Achai dams and Azakheli buffalo calves fed with milk replacer. **Pakistan Journal of Zoology** (SCI, IF=0.790). DOI: 10.17582/journal.pjz/2018.50.5.sc7.
6. Basit *et al.*, 2018. Occurrence and risk factors associated with *Mycobacterium tuberculosis* and *Mycobacterium bovis* in milk samples isolated from north east of Pakistan. **Pakistan Veterinary Journal** (SCI, IF=1.360). <http://dx.doi.org/10.29261/pakvetj/2018.00>.
7. Ali *et al.*, 2017. Characteristics and genetic diversity of multi-drug resistant extended-spectrum beta-lactamase (ESBL)-producing *Escherichia coli* isolated from bovine mastitis. **Oncotarget** (SCI, IF=5.168). doi:10.18632/oncotarget.21496.
8. Shah *et al.*, 2017. Isolation rate and antimicrobial susceptibility profiles of *Mycoplasma mycoides* subspecies capri field isolates from sheep and goats in Pakistan. **Small Ruminant Research** (SCI, IF=1.210). doi: <http://dx.doi.org/10.1016/j.smallrumres.2017.06.002>.
9. Ali *et al.*, 2016. ESBL-Producing *Escherichia coli* from Cows suffering mastitis in China contain clinical class 1 integrons with CTX-M Linked to ISCR1. **Frontiers in Microbiology** (SCI, IF=4.259). doi: 10.3389/fmicb.2016.01931.
10. Ali *et al.*, 2016. The role of selenium in insulin-like growth factor I receptor (IGF-IR) expression and regulation of apoptosis in mouse osteoblasts. **Chemosphere** (SCI, IF=4.427). doi: 10.1016/j.chemosphere.2015.11.003.

11. Ali *et al.*, 2015. Characterization of *Prototheca zopfii* genotypes isolated from cases of bovine mastitis and cow barns in China. **Mycopathologia (SCI, IF=2.278)**. doi: 10.1007/s11046-015-9951-9.
12. Ali *et al.*, 2014. Effect of management practices and animal age on incidence of mastitis in Nili Ravi buffaloes. **Tropical Animal Health Production (SCI, IF=1.089)**. 46(7):1279-85.
13. Ali *et al.*, 2009. Isolation, Identification and prevalence of gastrointestinal cestodes infecting Damani sheep and goats in district Dera Ismail Khan NWFP Pakistan. **Life Sciences International Journal** 3(4): 1279-1281.
14. Ali *et al.*, 2007. Prevalence of haemoparasites in cattle and buffaloes in D.I.Khan, NWFP Pakistan. **Life Sciences International Journal**, 1(1): 1-4.
15. Ali *et al.*, 2006. Comparative prevalence of sub-clinical and clinical mastitis and its economic losses in District, D.I.Khan, Pakistan. **Indus Journal of Biological Sciences**, 3 (2): 854-857.

c. List of published papers as co-author

2020:

16. Cui *et al.*, 2020. Emergence of livestock-associated MRSA ST398 from bulk tank milk, China. **Journal of Antimicrobial Chemotherapy (SCI, IF = 4.940)**. DOI: [10.1093/jac/dkaa367](https://doi.org/10.1093/jac/dkaa367)
17. Yang *et al.*, 2020. Molecular Epidemiology and Characteristics of Streptococcus agalactiae Isolated from Bovine Mastitis in Large Dairy Herds of China. **Pakistan Veterinary Journal (SCI, IF = 1.36)**. DOI: 10.29261/pakvetj/2020..025
18. Tasbihullah *et al.*, 2020. High Occurrence Rate of Multidrug-Resistant ESBL-Producing E. coli Recovered from Table Eggs in District Peshawar, Pakistan. **Pakistan Journal of Zoology (SCI, IF = 0.750)**. DOI: 10.17582/journal.pjz/20190513220514.

2019:

19. Khan *et al.*, 2019. Seroprevalence of bovine leukemia virus (BLV) in cattle from the north west of Pakistan. **Pakistan Veterinary Journal (SCI, IF = 1.36)**. DOI:10.29261/pakvetj/2019.103.
20. Nawab *et al.*, 2019. Polymorphisms in JAK2 gene are associated with production traits and mastitis resistance in dairy cattle. **Annals of Animal Science (SCI, IF = 1.5)**. DOI: 10.2478/aoas-2019-0082.
21. Ur Rahman *et al.*, 2019. How ESBL- and Carbapenemase- producing genes are mobilized- analysis of *Escherichia coli* isolates recovered from poultry retail meat in district Mardan KPK Pakistan. DOI: 10.1109/IBCAST.2019.8667126. Proceedings of 2019 16th International Bhurban Conference on Applied Sciences & Technology (IBCAST) Islamabad, Pakistan, 8th – 12th January, 2019.

2018:

22. Gang *et al.*, 2018. Characteristics of *Escherichia coli* Isolated from Bovine Mastitis Exposed to Subminimum Inhibitory Concentrations of Cefalotin or Ceftazidime. **Biomedical Research International (SCI, IF= 2.583)** 8; doi: 10.1155/2018/4301628
23. Zhang *et al.*, 2018. Phenotypic and genotypic characterization of antimicrobial resistance profiles in *Streptococcus dysgalactiae* isolated from bovine clinical mastitis in 5 provinces of China. **Journal of Dairy Sciences (SCI, IF=2.749)**. doi: 10.3168/jds.2017-14031
24. Zhang *et al.*, 2018. Virulence gene profiles: alpha-hemolysin and clonal diversity in *Staphylococcus aureus* isolates from bovine clinical mastitis in China. **BMC Veterinary Research. (SCI, IF=1.83)**. 14(1):63
25. Han *et al.*, 2018. P21Waf1/Cip1 depletion promotes dexamethasone-induced apoptosis of MC3T3-E1 cells by inhibiting the Nrf2/HO-1 pathway. **Archives of Toxicology (SCI, IF=5.9)**. 92(2):679-692.

2017:

26. Chen *et al.*, 2017. Cloning, expression and Immunogenicity of fimbrial-F17A subunit vaccine against *Escherichia coli* isolated from bovine mastitis. **Biomedical Research International (SCI, IF= 2.476)**. ID 3248483, 1-10. doi: 10.1155/2017/3248483.
27. Shahid *et al.*, 2017. *Prototheca zopfii* induced ultrastructural features associated with apoptosis in bovine mammary epithelial cells. **Frontiers in Cellular and Infection Microbiology. (SCI, IF=4.3)**. 7:299.
28. Chen *et al.*, 2017. *Nocardia cyriacigeorgica* from bovine mastitis induced in vitro apoptosis of bovine mammary epithelial cells via activation of mitochondrial-caspase pathway. **Frontiers in Cellular and Infection Microbiology (SCI, IF=4.3)**. 7: 194
29. Sun *et al.*, 2017. Characteristics of *Aerococcus viridans* isolated from bovine subclinical mastitis and its effect on milk SCC, yield, and composition. **Tropical Animal Health Production (SCI IF=0.912)**. 49(4):843-849.
30. Shahid *et al.*, 2017. *Prototheca zopfii* isolated from bovine mastitis induced oxidative stress and apoptosis in bovine mammary epithelial cells. **Oncotarget (SCI, IF=5.168)**. 8(19):31938-31947.
31. Shah *et al.*, 2017. Molecular identification and comparative antimycoplasmal activity of three indigenous medicinal plants against *Mycoplasma putrefaciens* isolated from sheep. **Journal of Animal and Plant Sciences (SCI, IF= 0.422)**. 27(5):2017.

2016:

32. Dong *et al.*, 2016. The co-relation of superantigen toxin genes profiles, genotypes and pathogenic characteristics of *Staphylococcus aureus* isolates from bovine mastitis. **Journal of Dairy Sciences (SCI, IF= 2.749)**. 99(12):9560-9569.
33. Rashad *et al.*, 2016. Properties and antimicrobial susceptibility of *Trueperella pyogenes* isolated from bovine mastitis in china. **Acta Veterinaria Hungarica (SCI, IF= 1.059)**. 64(1):1-12.
34. Haq *et al.*, 2016. Expression of interferon-stimulated gene ISG15 and ubiquitination enzymes is upregulated in peripheral blood monocyte during early pregnancy in dairy cattle. **Reproductive Biology (SCI, IF=1.880)** 16(4):255-260.

35. Hassan *et al.*, 2016. Polymorphism analysis of prion protein gene in eleven Pakistani goat breeds. **Prion (SCI, IF=2.24)**, 10(4):290304.

2015:

36. Gang *et al.*, 2015. Molecular and phenotypic characterization of *Aerococcus viridans* associated with subclinical bovine mastitis. **PLoS One (SCI IF=2.776)**, 10(4):e0125001.
37. Dengfeng *et al.*, 2015. Bovine mastitis *Staphylococcus aureus*: antibiotic susceptibility profile, resistance genes and molecular typing of methicillin-resistant and methicillin-sensitive strains in China. **Infection Genetics and Evolution (SCI IF= 2.885)**, 31: 9-16.
38. Hussain *et al.*, 2015. Citric and lactic acid effects on the growth inhibition of *E. coli* and *S. typhimorium* on beef during storage. **Sarhad Journal of Agriculture**, 31(3): 183-190.
39. Gu *et al.*, 2015. In vivo studies of molybdenum-induced apoptosis in kidney cells of caprine. **Biological Trace Elements Research (SCI IF=2.431)**, 165(1):51-58.
40. Rahman *et al.*, 2015. Washing of animal body coat effects on Salmonella load on hide and in post-slaughter carcasses. **SYLWAN (SCI IF = 0.623)**, 159(3); 400-415.

2014:

41. Liu *et al.*, 2014. Staphylococcal enterotoxin H induced apoptosis of bovine mammary epithelial cells in vitro. **Toxins (SCI IF= 3.895)**, 6: 3552-3567.
42. Liu *et al.*, 2014. Phylogenetic group, virulence genotype, antimicrobial resistance and associated genes of mastitis *Escherichia coli* isolated from Beijing, China. **Research in Microbiology (SCI IF=2.372)**, 165:273-277.
43. He *et al.*, 2014. Biofilm formation and biofilm-associated genes assay of *Staphylococcus aureus* isolated from bovine subclinical mastitis in China. **Pakistan Veterinary Journal (SCI IF= 1.36)**, 4: 508-513.

2006-2013:

44. Rehman *et al.*, 2013. Determination of Meat yield and dressing percentage of Turki, Afghan Arai and Baluchi sheep breeds in Afghanistan. **Sarhad Journal of Agriculture**, 29 (2):113-117.
45. Shah *et al.*, 2012. Determination of genotype differences through restriction endonuclease in Camels (*Camelus dromedarius*). **African Journal of Biotechnology (SCI IF=0.50)**, 11(53):11543-11547.
46. Rahman *et al.*, 2012. Dressing Percentage and Offal Production of Various Breeds of Zebu Cattle Slaughtered at the Peshawar Abattoir. **Sarhad Journal of Agriculture**, 28 (4):655-659.
47. Khan *et al.*, 2006. Bacteriology of mastitic milk and in vitro antibiogram of the isolates. **Indus Journal of Biological Sciences**, 3 (2): 829-833.

48. Khan *et al.*, 2006. Prevalence of Theileriosis in cattle & economic efficacy of Drugs. **Indus Journal of Biological Sciences**, volume-3, No. 1, Jan, 2006.

9. Learned conferences

1. Attended and presented oral paper on “How ESBL- and Carbapenemase- Producing Genes are Mobilized- Analysis of *Escherichia coli* Isolates Recovered From Poultry Retail Meat in District Mardan KPK Pakistan” in the 16th *International Bhurban Conference on Applied Sciences and Technology (IBCAST)*- 8th to 12th January, 2019. DOI: 10.1109/IBCAST.2019.8667126.
2. Characterization and mechanism of dissemination of extended spectrum beta lactamase producers *Escherichia coli* in food producing animals in Pakistan and China. 15th *International Bhurban Conference on Applied Sciences and Technology (IBCAST)*, 2018. DOI: 10.1109/IBCAST.2018.8312224.
3. Attended 7th *Congress of Federation of European Microbiologists Society (FEMS) 2017*, held at Valencia, Spain. The poster presentation was on “Prevalence and molecular characterization of multi-drug resistant extended-spectrum beta-lactamase (ESBL)-producing *Escherichia coli* isolated from bovine mastitis”. Abstract Number: FEMS7-3030.
4. Attended the conference of *China International Dairy Mastitis Forum*, 24-25 Nov 2014, Boehringer Ingelheim, Beijing, China.
5. “Isolation, Identification, molecular characterization and epidemiological investigation of *Prothea zopfi* from bovine mastitis” in *International Symposium: Global approach to control of diseases and improvement of productivity in dairy cattle through the recent advance in nutritional, metabolic, immunological and genetic studies in Okayama, Japan*; 02/2015.
6. Phenogenetic properties of *Staphylococcus aureus* isolated from mastitis at two dairy herds in China” in *XXV International Congress of The Hungarian Association of For Buiatrics, Danubius Health Spa Resort Helia, Budapest, Hungary, 13-16th September, 2015*.
7. Molecular and phenotypic characterization of *Aerococcus viridans* associated with subclinical bovine mastitis” in the *XXV International Congress of The Hungarian Association of For Buiatrics, Danubius Health Spa Resort Helia, Budapest, Hungary, 13-16th September, 2015*.
8. Participated in the 36th *all Pakistan Science Conference “National Prosperity through Livestock & Poultry Development”* 12-13 November, 2012, Gomal University, D.I.Khna, Pakistan.

10. Professional Memberships

- *Pakistan Veterinary Medical Association*, Khyber Pakhtunkhwa
- Also, I am Registered Veterinary Practitioner (Life time) *Pak. Vet. Medical Council*.

11. Professional Trainings

- *Diagnostic Laboratory Operation and Management* (Jan 6 to 10, 2005), at National Veterinary Laboratory, Islamabad under European Union and strengthening livestock Project (EU-SLSP).
- *Information Technology Training and office Automation* (1st to 31st July 2005), at Petroman Institute of Information Technology D.I.Khan, under European Union-Strengthening of Livestock Services Project (EU-SLSP).
- *Computer Training Module-II* (22nd September to 27th September 2005) at Barani Institute of Information Technology, Rawalpindi under EU-SLSP.
- *Farmer Field School* training organized by Project for Livelihood Improvement (PLI; Swiss Agency for Development & Cooperation).
- *Farmer Centered Approaches* training (28th to 1st July 2007) organized by PLI (Project of Swiss Agency for Development and Cooperation).
- *Mastitis detection tests and somatic cell count of milk*, training at Veterinary Research Institute, Peshawar.
- *McMaster Technique*, training at VRI, under EU-SLSP.
- *Poultry Disease Diagnosis*, (two months training) organized by Medi-excel laboratories, Islamabad.

12. Research Projects/Grants:

Project Title	Donor	Position	Grant No.	Year	Amount	Status
Dissemination of antibiotic resistance bacteria through meat and milk: focusing on the Extended-Spectrum β -lactamase producing and carbapenem resistant <i>Escherichia coli</i>	NSFC-China	Co-PI	3155011000	2015-17	66,000 USD	Completed
Epidemiological survey of mastitis and evaluation of economic losses due to clinical and sub-clinical mastitis in NWFP, province of Pakistan.	ALP-PARC Pak	Technical officer		2005-8	2.4 milion Rs.	Completed

13. Post graduate student supervision

Name	Master/Ph.D	Year	Research Topic	University
Ms. Nishmal Aslam	M.Phil	2019	Antibiotic susceptibility and virulence genes in <i>Escherichia coli</i> isolates recovered from cases of bovine mastitis	Quid-e-Azam university
Aswera Ihsan	M.Phil	2019	Prevalence of Colistin (Polymyxin E) resistant <i>mcr-1</i> gene in <i>Escherichia coli</i> isolated from poultry birds chicken at district Peshawar	University Of Agri. Peshawar
Asfandiyar Khan	M.Phil	2016	Prevalence and dissemination of drug resistant <i>E. Coli</i> in milk and human at district Peshawar	University Of Agri. Peshawar
Farida Khan	PhD	In progress	Prevalence and characterization of Bovine Leukaemia virus in cattle of Khyber Pakhtunkhwa	University Of Agri. Peshawar

14. External Examiner

I have been external examiner for evaluation of:

- i. M. Phil student at Department of Animal Health, University of Agriculture, Peshawar, Pakistan for the year, 2019.
- i. M. Phil student at IBGEE, University of Agriculture, Peshawar, Pakistan for the year, 2019.

15. Journals Reviewers

I am regular reviewers of various peer reviewed journals like Frontiers in Veterinary Sciences, Journal of Dairy Science, Pakistan Journal of Zoology, Sarhad Journal of Agriculture, etc.

16. References

1. Prof. Dr. Han Bo, College of Veterinary Medicine, China Agricultural University Yuan Ming Yuan West Road No. 2 Haidian District, Beijing 100193, China Tel: +86-10-62733801 Fax: +86-10-62737865 E-mail: hanbo@cau.edu.cn
2. Prof. Dr. Herman W. Barkema, Professor Epidemiology of Infectious Diseases, Head of Department of Production Animal Health, Faculty of Veterinary Medicine, University of Calgary.
Tell: 001(403) 220 2659
E. mail: barkema@ucalgary.ca
3. Prof. Dr. Umer Sadique, Principal, College of Veterinary Science, Faculty of Animal and Veterinary Sciences, University of Agriculture Peshawar. Contact # +92-91-9221028
E-mail: druskhattak@aup.edu.pk; druskhattak@yahoo.com