



## Europass curriculum vitae



### Personal information

First name(s)/ Surname(s)

Address(es)

Nationality(-ies)

Date of birth

CNIC

Telephone(s)

E-mail(s)

**Dr. Tahir Usman**

**Work/Mailing Address:** Associate Professor, College of Veterinary Sciences & Animal Husbandry, Abdul Wali Khan University Mardan, Pakistan.

**Pakistani**

**16/07/1985**

**14202-1716301-9**

**Mobile: +92-313-0920177**

**[tahircau@gmail.com](mailto:tahircau@gmail.com); [tahirusman@awkum.edu.pk](mailto:tahirusman@awkum.edu.pk)**

### Work experience

Dates

Occupation or position held

Main activities and responsibilities

Name and address of employer

August 2020 - To date  
January, 2009 - July, 2010

**Associate Professor**  
**1: Lecturer (on contract bases)**

Teaching + Research

Teaching Biology

Abdul Wali Khan University Mardan  
Practical training to the students

Dates

Occupation or position held

Main activities and responsibilities

Name and address of employer

February 2015 – August 2020  
University

**Assistant Professor**

Teaching + Research

Feb. 2007 - Dec. 2008

Abdul Wali Khan University Mardan

Dates

Occupation or position held

Main activities and responsibilities

Name and address of employer

**2: Veterinary Officer**

August 2014 – February 2015

**Assistant Professor**

Teaching + Research

Department of livestock, Karak, KPK, Pakistan.

Agriculture University Peshwar

Dates

Occupation or position held

Main activities or responsibilities

Name of the employer

March 2014 – To date

**Editor**

Editing and Proof reading of the English manuscript

Medjaden Bioscience Limited

Dates

Occupation or position held

Main activities or responsibilities

Name of the employer

January 2010 - August 2010

**Farm Manager**

Vaccination, diagnosis and treatment of the sick animals

Toru Dairy Farm, Mardan

## Education and training

<p><b>Dates</b></p> <p>Title of qualification awarded</p> <p>Principal subjects/ skills covered</p> <p>Name and type of organisation</p>	<p><b>2015-2016</b></p> <p><b>DAAD-Post Doc Fellowship from Germany (Genomics)</b></p> <p>Molecular Genetics, Genomics, Bioinformatics, Next generation sequencing, RNA seq, Different software and operating system (Linux, Unix) for data analysis</p> <p><i>Leibniz Institute for Farm Animal Biology, Dummerstorf, Germany</i></p>
<p><b>Dates</b></p> <p>Title of qualification awarded</p> <p>Principal subjects/ skills covered</p> <p>Name and type of organisation</p>	<p><b>2011-2014</b></p> <p><b>PhD from China (Molecular Genetics)</b></p> <p>Molecular Biology, Genetics, Cell Biology, Molecular Pathology, Reproductive Biotechnology, Different software i.e. SAS, SPSS for data analysis</p> <p><i>China Agricultural University Beijing, P.R China</i></p>
<p><b>Dates</b></p> <p>Title of qualification awarded</p> <p>Principal subjects/ skills covered</p> <p>Name and Type of organization</p>	<p><b>2009-2010</b></p> <p><b>MSc (Hons) (Animal Genetics &amp; Breeding)</b></p> <p>Genetics, Farm animal breeding, Statistics</p> <p><i>The University of Agriculture Peshawar, Pakistan</i></p>
<p><b>Dates</b></p> <p>Title of qualification awarded</p> <p>Principal subjects/ skills covered</p> <p>Name and type of organisation</p>	<p><b>2004-2008</b></p> <p><b>DVM (Doctor of Veterinary Medicine)</b></p> <p>Farm animal breeding, Genetics, Statistics, Biochemistry, Surgery, Medicine, Parasitological, Microbiology, Molecular biology, Physiology, Pathology etc.</p> <p><i>The University of Agriculture Peshawar, Pakistan</i></p>
<p><b>Dates</b></p> <p>Title of qualification awarded</p> <p>Principal subjects/ skills covered</p> <p>Name and type of organisation</p>	<p><b>2001-2003</b></p> <p><b>FSc</b></p> <p>Zoology, Botany, Physics, Chemistry etc.</p> <p><i>Garrison Cadet College Kohat, KPK, Pakistan</i></p>
<p><b>Dates</b></p> <p>Title of qualification awarded</p> <p>Principal subjects/ skills covered</p> <p>Name and type of organisation</p>	<p><b>1999-2001</b></p> <p><b>SSC</b></p> <p>Biology, Mathematics, Physics, Chemistry etc.</p> <p><i>Government high school Jandrai Karak, KPK, Pakistan</i></p>

## Personal skills and competences

Mother tongue(s)

Other language(s)

*Self-assessment*

*European level (\*)*

**Pushto**

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	

Urdu (National language)  
English (Official Language)  
Chinese

Excellent	Excellent	Excellent	Excellent	Excellent
Excellent	Excellent	Excellent	Excellent	Excellent
Excellent	Fair	Excellent	Excellent	Fair

<sup>(\*)</sup> Common European Framework of Reference (CEF) level

## Awards

- |             |   |
|-------------|---|
| <b>2020</b> | 1. <b>Award of travel grant</b> for training/workshop on biosafety manual development February 17-19, 2020, Colombo, Sri Lanka.   |
| <b>2018</b> | 2. <b>Award of travel grant</b> for 4 <sup>th</sup> International Conference on Sheep Genomics October 15-18, 2018, Nanjing, China.   |
| <b>2017</b> | 3. <b>Award of travel grant</b> for International Society of Animal Genetics (ISAG) Conference 16-21 July, 2017, Dublin, Ireland.<br>4. <b>Award of DAAD Post Doctorate Fellowship</b> at the Leibniz Institute for Farm Animal Biology, (FBN) Dummerstorf, Germany 2016-2017.  |
| <b>2016</b> | 5. <b>Award of travel grant</b> after completion of Post Doc dated March 30, 2017 by HEC, Pakistan.<br>6. <b>Award of travel grant</b> for Falling Walls Berlin 08-09 Nov. 2016, Berlin, Germany.<br>7. <b>Award of travel grant</b> for DAAD-Stapendium 20-22 May 2016, Leipzig, Germany.  |
| <b>2014</b> | 8. <b>Award of travel grant</b> for the Winter School 2014 "Precision farming for the sustainability of dairy cattle production" held in Piacenza, Italy.   |
| <b>2013</b> | 9. <b>Award of national scholarship</b> for the session 2012-2013 by China Agriculture University dated 23-4-2014.<br>10. <b>Award of travel grant</b> for International Society of Animal Genetics Conference 27-31 July. 2014, Xi'an, China.<br>11. <b>Award of travel grant</b> for World Conference of Animal Production 14-20 Oct. 2013, Beijing, China.<br>12. <b>Award of full scholarship</b> for Livestock Functional Genomics Summer School 13-21 Sep. 2013, Sao Paulo, Brazil.<br>13. <b>Declared as 4<sup>th</sup> best young scientist</b> in all field of animal and veterinary sciences in 2013 by the National Academy of Young Scientists (NAYS) Pakistan.<br>14. <b>Award of full scholarship</b> for international symposium on Animal Functional Genomics 09-11 Sep. 2013, Sao Paulo, Brazil. |
| <b>2012</b> | 15. <b>Award of partial travel grant</b> for the 2nd International Conference on Dairy Science Park 18-20 Nov. 2013, Peshawar, Pakistan.<br>16. <b>Award of excellent research achievement</b> by China Agriculture University for the year 2012.   |
| <b>2011</b> | 17. <b>Award for oral presentation</b> in the Pak-China 60 <sup>th</sup> friendship anniversary celebrated in May 2011 in Beijing.<br>18. <b>Award of excellent Cultural Activities</b> by CAU for the year 2011.   |
| <b>2010</b> | 19. <b>Award of doctoral full scholarship</b> by China Scholarship Council from 2011 to 2014.<br>20. <b>Award of bronze medal</b> for getting 3 <sup>rd</sup> position in master degree (2009-2010) in the Faculty of Animal Husbandry and Veterinary Sciences awarded by The Agriculture University Peshawar, Pakistan.  |

## Social works

- 1: Participated in **rescue and relief camp** in earth quake effected area in Balakot, Pakistan for one week.
- 2: **Served in flood affected area** at Reggi Lalma Peshawar, Pakistan in Relief camps for two weeks.

## Technical skills and competences

Next generation sequencing, RNA seq, DNA seq, DNA extraction from different tissues, RNA extraction, Western Blot, Gel Electrophoresis, PAGE, PCR, Real Time

PCR, qRT-PCR, DNA Bisulphite treatment, Tissue culture, Teaching, Motivational skills, Technical Writing, Artificial insemination, Semen collection, Milking, Pregnancy test, Diagnosis and Treatment of the animals.

### **Computer/analytical skills and competences**

Linux, Unix, SAS, DMU, Ms Office, SPSS, GENEPop, TFSEARCH, Western Blot, Swiss model, Oligo 6, Primer 3, Primer Blast, DNAMAN, UCSC search, NCBI search, Ensemble search, different online softwares etc.

### **Workshops organized/ attended**

1. Three days training/workshop on biosafety manual development February 17-19, 2020, Colombo, Sri Lanka
2. Served as facilitator/trainer in Virtual Master trainer program from October 2019 to January 2020.
3. ASM 52 weeks program on One Health from January 2019-December 2019.
4. Served as facilitator/trainer in one day “awareness workshop on biosafety and biosecurity” organized by Sarhad University Peshwar dated Nov. 14, 2019.
5. Two days refresher training on the bio risk management organized by the association for biorisk management (ABM). August 06-07, 2019, at AWKUM.
6. Served as facilitator/trainer in one day “awareness workshop on biosafety and biosecurity” organized by Absyn University Peshwar dated August 01, 2019.
7. Served as facilitator/trainer in five days “Training of the Trainer workshop on biosafety and biosecurity” (Bioprism), organized by PBSA dated September 15-19 May, 2019, Islamabad, Pakistan.
8. One day “workshop on Influence Without Authority” organized by Pakistan Biological Safety Association (PBSA) dated February 09, 2019 at NIH Islamabad.
9. Five days “Master Trainer workshop on biosafety and biosecurity” (Bioprism), organized by PBSA dated January 14-18, 2019, Islamabad, Pakistan.
10. Five days “Training of the Trainer workshop on biosafety and biosecurity” (Bioprism), organized by PBSA dated September 15-19, 2018, Islamabad, Pakistan.
11. Participated as a resource person in the hands on training workshop on the “effective use of End Note in the technical writing” organized by the Shaheed Benazir Bhutto University Peshawar in May 02, 2018.
12. Co-chaired 3rd International Conference on Technology and Business management dated March 28-29, 2018 at Abasyn University Peshawar.
13. Organized one day awareness workshop on “Biosafety and Biosecurity Principles and Practices” dated April 12, 2018 at the college of veterinary sciences and animal husbandry, Abdul Wali Khan University Mardan.

### **Member in International Conferences**

1. Technical Program Committee member of the 4<sup>th</sup> International Conference on Agriculture and Biological Sciences dated June 26<sup>th</sup>-29<sup>th</sup>, 2018, Hangzhou, Zhejiang, China.
2. Reviewer of the 4<sup>th</sup> international conference and industrial exhibition on Dairy Science Park dated November 1-5, 2017, Konya, Turkey.
3. Technical Program Committee member of the International Conference on Animal Sciences and Conservation dated November 28-30, 2017 at Sanya, China.
4. Technical Program Committee member of the International Conference on Microbiology, Virology and Immunology dated December 1-3, 2017 at Sanya, China.

### **Participation in International Conferences 2019**

1. International conference on recent trends in biotechnology October 16-18, 2019, Allam Iqbal Open University, Islamabad.
2. International Buffalo Congress 18-20 February 2019 Lahore-Pakistan.
3. International conference “Use of Genome Editing for Global Food Security” April 8-10, 2019, Islamabad, Pakistan

- 2018 4. 4<sup>th</sup> International Conference on Sheep Genomics, October 15-18, 2018, Nanjing, China.
- 2017 5. International One Health Conference November 09-10 2017, Jheng, Pakistan.
- 2017 6. International Society of Animal Genetics (ISAG) Conference 16-21 July, 2017, Dublin, Ireland.
- 2016 7. Leibniz-Kolleg for Young Researchers “Chances and Challenges of Interdisciplinarity”, 9-11 November 2016, Berlin Germany.
- 2016 8. Falling Walls Berlin, 8-9 November 2016, Berlin Germany.
- 2016 9. DAAD Stapendium meeting, 20-22 May 2016, Leipzig Germany.
- 2015 10. International Conference on Dairy Science Park, 16-18 Nov 2015, Peshawar, Pakistan.
- 2014 11. International Society of Animal Genetics Conference, July 27 – August 1, 2014, Xi’an, China.
- 2014 12. International Conference on Advances in Parasitology and Public Health 22-24 Oct 2014, Jhang, Pakistan.
- 2013 13. International Conference on Zoonoses 17-19 Oct 2014, Multan Pakistan.
- 2013 14. International Symposium on Livestock Functional Genomics, 09-11 Sep 2013, Sao Paulo, Brazil.
- 2013 15. World Conference on Animal Production, 15-20 Oct 2013, Beijing, China.
- 2013 16. International Conference on Dairy Science Park, 18-20 Nov 2013, Peshawar, Pakistan.
- 2011 17. International Conference on Dairy Science Park, 21-23 Nov 2011, Peshawar, Pakistan.
- 2011 18. Sino-Pak University Student Forum, 23-27 May 2011, Beijing, China.

#### Oral Presentations

- 2019 1) 1<sup>st</sup> international conference on “Recent Trends in Biotechnology” Allama Iqbal Open University Islamabad 16-18 October, 2019.
- 2019 2) 1<sup>st</sup> National Conference “Microbiology Infectious Diseases and Health Safety” 4-5th April, 2019, Swabi, KP, Pakistan
- 2018 3) 4<sup>th</sup> International Conference on Sheep Genomics, October 15-18, 2018, Nanjing, China.
- 2017 4) International One Health Conference November 09-10 2017, Jheng, Pakistan.
- 2016 5) Leibniz Institute for Farm Animal Biology (FBN) Dummerstorf, Germany December 2016, FBN Dummerstorf, Germany.
- 2016 6) Leibniz-Kolleg for Young Researchers “Chances and Challenges of Interdisciplinarity”, 9-11 November 2016, Berlin Germany.
- 2015 7) International Conference on Dairy Science Park, 16-18 Nov 2015, Peshawar, Pakistan.
- 2014 8) International Conference on Zoonoses 17-19 Oct 2014, Multan Pakistan.
- 2014 9) International Society of Animal Genetics Conference, July 27-August 1, 2014, Xi’an, China.
- 2013 10) The 11<sup>th</sup> World Conference on Animal Production, 15-20 Oct 2013, Beijing, China
- 2013 11) International Symposium on Livestock Functional Genomics, 09-11 Sep 2013, Sao Paulo, Brazil.
- 2011 12) Sino-Pak University Student Forum, 23-27 May 2011, Beijing, China.

Authors: **Tahir Usman**, Syed Muhammad Suhail, Yachun Wang  
 Genetic Evaluation of Holstein Cattle under Subtropical Conditions, LAP LAMBERT Academic Publishing, ISBN: 978-3-659-48218-2

#### Books Written

#### Membership of Learned Societies

- 1) Member of the American Society of Microbiologist (ASM).
- 2) Life time member of Pakistan Biological Safety Association (PBSA).
- 3) Member of the International Society of Animal Genetics (ISAG).
- 4) Member of the International Society for Applied Life Sciences (ISALS).
- 5) Member of Pakistan Veterinary Medical Council (PVMC).
- 6) Member of German Academic Exchange Services (DAAD) alumni.
- 7) Member of Pakistan Veterinary Medical Association (PVMA).

**Post Doc research**

Next generation sequencing research on a new disease (Bovine Neonatal pancytopenia) in youngborn calves in Germany

**Doctoral Disertation Title**

Genetic and epigenetic effects of JAK-STAT pathway related genes on mastitis resistance in Chinese Hosltein cattle

**Master Thesis Title**

Genetic evaluation of dairy herd maintained at Agriculture University Dairy Farm Peshawar

**Publications**

**2020**

- 1、 Arsalan Rasheed, **Tahir Usman**, Kamal Niaz 2020. A review on bovine mastitis with special focus on CD4 as a potential candidate gene for mastitis resistance—a review. *Annals of Animal sciences*, (**Published, IF: 1.22**).
- 2、 Lirong Hu, Dong Li, Qin Chu, Yachun Wang, Lei Zhou, Ying Yu, Yuan Zhang, Shengli Zhang, **Tahir Usman**, Zhenquan Xie, Shiyu Hou, Lin Liu, Wanhai Shi 2020. Selection and implementation of SNP markers for parentage analysis in a Chinese crossbred cattle population. *Animal* (**Published, IF: 1.8**).
- 3、 Saqib Zeb, Nawab Ali, Sadaf Niaz, Arsalan Rasheed, Irfan Khattak, Naimat Ullah Khan, Yachun Wang, **Tahir Usman** 2020. Association of SNPs in the coding regions of CD4 gene with mastitis susceptibility and production traits in dairy cattle. *The Thai Journal of Veterinary Medicine* 50 (1), 75-80 (**Published, IF: 0.4**).
- 4、 Arsalan Rasheed, Nawab Ali, Sadaf Niaz, Saqib Zeb, Irfan Khattak, Adnan Khan, Iftikhar Ahmad, Yachun Wang 2020. Single Nucleotide Polymorphisms in the Promoter of CD4 Gene are Associated with Production and Mastitis Traits in Dairy Cattle. *Pakistan Veterinary Journal* 40 (3), 394-396 (**Published, IF: 1.2**).

**2019**

- 5、 Adnan Khan, Jinhuan Dong, Xiaolong Jian, Muhamad Zahoor Khan, Hanpeng Luo, **Tahir Usman**, Huabin Zhou and Yachun Wang 2019. Evaluation of heat stress effects o non celluler and transcriptional adaptation of bovine granulosa cells. *Journal of Animal Science and Biotechnology*, (**Published, IF: 3.44**).
- 6、 Nawab Ali, Sadaf Niaz, Naimat Ullah Khan, Ali Gohar, Irfan Khattak, Yixin Dong, Tariq Khattak, Iftikhar Ahmad, Yachun Wang and **Tahir Usman\*** 2019. Polymorphisms in *JAK2* gene are associated with production traits and mastitis resistance in dairy cattle. *Annals of Animal sciences*, 10.2478/aoas-2019-0082. (**Published, IF: 1.22**).
- 7、 Muhammad Zahoor Khan, Di Wang, Lei Liu, **Tahir Usman**, Hui Wen, Ruiqiang Zhang, Shuli Liu, Liangyu Shi, Siyuan Mi, Wei Xiao Ying Yu 2019. Significant genetic effects of *JAK2* and *DGAT1* mutations on milk fat content and mastitis resistance in Holsteins. *Journal of Dairy Research* 4(86). 388-393. (**Published, IF: 1.4**).
- 8、 Muhammad Zahoor Khan, Liu Lei, Wang Di, Yachun Wang, **Tahir Usman**, Adnan Khan, and Yu Yin 2019. Folic Acid supplementation regulates milk production variables, metabolic associated genes and pathways in perinatal Hosteins. *Journal of Animal Physiology and Animal Nutrition*. (**Published, IF: 1.3**).
- 9、 Naimat Ullah Khan, Samia Sultan, Ihsan Ullah, Hazrat Ali, Mian Saeed Sarwar, Anwar Ali, **Tahir Usman**, Azmat Ullah Khan, Munib Hussain, Mehboob Ali, Fazli Rabbani and Attaur Rahman 2019. Epidemiological study of bovine fasciolosis using coprological technique in district Mardan, Khyber Pakhtunkhwa, Pakistan. *Pure and Applied Biology*. 9(1), 455-463. (**Published, HEC recognized Y catagery**).
- 10、 Naimat Ullah Khan, Samia Sultan, Ihasan Ullah, Mian Saeed Sarwar, **Tahir Usman**, HazratAli, Anwar Ali, Azmatullah Khan, Fazli Rabbani, Abdul Razzaq and Munib Hussain. First Study of Equine Cryptosporidiosis in Asymptomatic Traction Horses in Peshawar Khyber Pakhtunkhwa Pakistan. *Pure and Applied Biology*. 9(1), 396-402. (**Published, HEC recognized Y catagery**).
- 11、 Hammad Ullah, Rifat Ullah Khan, Muhammad Mobashar, Shakoor Ahmad, Abdul Sajid, Naimat Ullah Khan, **Tahir Usman**, Irfan Khattak & Hamayun Khan 2019. Effect of yeast-based selenium on blood progesterone, metabolites and milk

- yield in Achai dairy cows, *Italian Journal of Animal Science*, 18:1, 1445-1450. **(Published, IF: 0.77).**
- 12、 Azra A, Kaleemullah M, Khattak B, Asma N, Safia AUR, Qaiser J, Afzal M, **Tahir U**, Sindhu ZUD, and Farhan Y. 2019. Comparative efficacy of domestic garlic (*Allium sativum*) and neem (*Azadirachta indica*) against *Haemonchus contortus* in small ruminants. *Applied Ecology and Environmental Research* 17(5):10389-10397. **(Published, IF: 0.72).**
- 13、 Mian Saeed Sarwar, Hazrat Ali, **Tahir Usman\***, Naimat Ullah Khan, Hamayun Khan, Imad Khan, Mumtaz Ali Khan and Fazli Rabbani 2019. A study on immunological response of leukocytes to ticks in cattle reared in sub-tropical region of Khyber Pakhtunkhwa Pakistan. *Pure and Applied Biology* 8(2): 1655-1660. **(Published, HEC recognized Y category).**
- 2018 14、 Musa A.A., S.E. Abdulmalik, A.J. Shoyombo, O.M. Akinsola and **T. Usman** 2018. Morphological Characterization of Nigerian Chicken Genotypes Using Multivariate Analyses. *International Journal of Poultry Sciences* 17: 560-567. **(Published, IF: 0.24).**
- 15、 Ayesha Safdar Chaudhry, Muhammad Arif Khan, Muhammad Sarwar Khan, Kamran Ashraf, Muhammad Hassan Saleem, Naimat Ullah Khan, **Tahir Usman** and Imtiaz Ahmad (2018). Effect of different level of concentrate feeding on hematobiochemical parameters in an experimentally induced sub acute ruminal acidosis (SARA) in sheep. *The Journal of Animal and Plant Sciences* 28(1):80-84 **(Published, IF: 0.45).**
- 16、 Ibrar Muhammad Khan, Rifat Ullah Khan, Muhammad Subhan Qureshi, **Tahir Usman**, Adnan Khan, Zakir Ullah, Hamid Rehman. (2018). Cross breeding promotes deterioration of semen quality in cattle Bulls. *Pakistan Journal of Zoology* 50(1) 97-103. **(Published, IF: 0.45).**
- 2017 17、 **Tahir Usman**, Yachun Wang, Minyan Song, Xiao Wang, Yichun Dong, Chao Liu, Shuxiang Wang, Yi Zhang, Wei Xiao, Ying Yu (2017). Novel polymorphisms in bovine *CD4* and *LAG-3* genes associated with somatic cell counts of clinical mastitis cows. *Genetics and Molecular research* 17(1): gmr16039859 **(Published, IF 0.8).**
- 18、 Qin Chu, Zhixun Yan, Jian Zhang, **Tahir Usman**, Yao Zhang, Hui Liu, Haihong Wang, Ailian Geng and Huagui Liu. (2017). Association of SNP rs80659072 in the ZRS with polydactyly in Beijing You chickens. *PLoS One* 12(10): e0185953 <https://doi.org/10.1371/journal.pone.0185953> **(Published, IF: 2.8).**
- 19、 Naimat Ullah Khan, Muhammad Hassan Saleem, Aneela Zameer Durrani, Nisar Ahmad3, Ayesha Hassan, **Tahir Usman**, Mumtaz Ali Khan, Kashif Prince, Mian Saeed Sarwar, Hazrat Ali (2017). Prevalence and risk factors analysis for *Cryptosporidium* in apparently healthy lambs of Southern Khyber Pakhtunkhwa, Pakistan. *Pakistan Journal of Zoology*. <http://dx.doi.org/10.17582/journal.pjz/2018.50.3.863.868> **(Published, IF: 0.45).**
- 20、 Muhammad Zahoor, **Tahir Usman\***, Ummer Sadique, Muhammad Subhan Qureshi, Mohammad Farooque Hassan, Muhammad Shahid, Muhammad Adnan (2017). Molecular characterization of *Brucella abortus* and *Brucella melitensis* through duplex polymerase chain reaction in cattle and human at the North West of Pakistan. *Pakistan Veterinary Journal*. 37(3): 360-363 **(Published, IF: 0.84).**
- 21、 Attaur Rahman, Saeed Ahmad Soomro, Hameed u Rehman, Sultan Ayaz, Sadeeq ur Rahman, Shagufta Saddozai, **Tahir Usman**, Muhammad Tariq, Muhammad Arshad Iqbal and Kausar Saeed (2017). Effects of exogenous bovine somatotropin (rbST) on blood biochemistry of Kundhi buffalo calves. *Journal of Entomology and Zoology Studies* 5(1): 322-327 **(Published, IF: 0.37).**
- 22、 **Tahir Usman**, Frieder Hadlich, Wiebke Demasius, Rosemarie Weikard, Christa Kühn (2017). Evaluation of the *Bos taurus* unmapped RNA sequence data from the reference bovine genome. *Genomics* [doi: http://dx.doi.org/10.1016/j.ygeno.2016.11.009](http://dx.doi.org/10.1016/j.ygeno.2016.11.009) **(Published, IF: 2.9).**
- 23、 **Tahir Usman**, Yachun Wang, Chao Liu, Yanghua He, Xiao Wang, Yichun Dong, Hongjun Wu, Airong Liu and Ying Yu (2017). Novel SNPs in IL-17F and IL-17A genes associated with with somatic cell count in Chinese Holstein and

- Sanhe Cattle. *Journal of Animal Science and Biotechnology* doi: 10.1186/s40104-016-0137-1 (Published, IF: 3.44).
- 24、 Yuezhen Tian, **Tahir Usman\***, Kechuan Tian, Jiang Di, Xixia Huang, Xinming Xu, Hanikezi, Weiwei Wu, Xuefeng Fu, Yan Bai, Mayila, Aimaiti (2017). Comparative study of 13 candidate genes applying multi-reference normalization to detect the expression of different fineness in skin tissues of wool sheep. *Genetics and Molecular research* 16(1). doi: 10.4238/gmr16018905. (Published, IF 0.8).
- 2016 25、 **Tahir Usman**, Ying Yu, Liwei Zhai, Chao Liu, Xiao Wang and Yachun Wang (2016). Association of SNPs in CD4 gene with fat percentage of Holstein cattle. *Genetics and Molecular research* 15 (3): doi: gmr15038697 (Published, IF 0.8).
- 2015 26、 **Tahir Usman**, Yachun Wang, Chao Liu, Xiao Wang, Qin Zhang, Ying Yu (2015). Association study of single nucleotide polymorphisms in *JAK2* and *STAT5B* genes and their differential mRNA expression with mastitis susceptibility in Chinese Holstein cattle. *Animal Genetics*. 46, 371–380 (Published, IF 2.58).
- 2014 27、 **Tahir Usman**, Ying Yu, Chao Liu, Xiao Wang, Qin Zhang, Yachun Wang (2014). Genetic effects of single nucleotide polymorphisms in *JAK2* and *STAT5A* genes on susceptibility of Chinese Holsteins to mastitis. *Molecular Biology Report*. 41 (12), 8293-8301 (Published, IF 2.5).
- 28、 **Tahir Usman**, Chao Liu, Ziyao Fan, Ying Yu and Yachun Wang (2014). Comparison of methods for high quantity and quality genomic DNA extraction from raw cow milk. *Genetics and Molecular Research*. 13 (2): 3319-3328 (Published, IF 0.85).
- 29、 **Tahir Usman**, Syed Muhammad Suhail, Xu Zhang, Gang Guo, Ihsan Ullah and Yachun Wang (2014). Effects of non-genetic factors on age at first conception and calving interval in Holstein cattle under subtropical conditions. *Indian Journal of Animal Sciences*. 84 (1): 43–49. (Published, IF 0.12).
- 30、 Xiao Wang, Xin Wang, Yachun Wang, Guo Gang, **Tahir Usman**, D. Hao, X. Tang, Yi Zhang, Ying Yu (2014). Antimicrobial Resistance and Toxin Genes Profiles of Staphylo coccus aureus Strains from Holstein Milk. *Letters in Microbiology* 58, 527-534 (Published, IF 1.78).
- 31、 Ke He, Picheng Si, Hanning Wang, **Usman Tahir**, Kaiyun Chen, Jinfeng Xiao, Xiaopeng Duan, Rui Huang and Guoan Xiang (2014). Crocetin induces apoptosis of BGC-823 human gastric cancer cells. *Molecular Medicine Reports*. 9: 521-526. (Published, IF 1.67).
- 2013 32、 Gang Guo, Xiangyu Guo, Yachun Wang, **Tahir Usman**, Shengli Zhang, Xizhi Li, LinLiu, Xinyu Wang, Qin Zhang (2013). Estimation of genetic parameters of fertility traits in Chinese Holstein cattle. *Canadian Journal of Animal Science*. 94(2): 281-285. (Published, IF 1.081).
- 33、 Xuan Liu\*, **Tahir Usman\***, Yachun Wang, Zhou Xu, Meng Wu, Xu Zhang, Qiang Li, Yi Zhang, Ying Yu (2013). Polymorphisms in epigenetic and meat quality related genes in fourteen cattle breeds and association with beef quality and carcass traits. *Asian Australian Journal of Animal Science*. 28(4):467-75 (Published, IF 0.64).
- 34、 **Tahir Usman**, Muhammad Subhan Qureshi, Ying Yu and Yachun Wang (2013). Influence of various environmental factors on dairy production and adaptability of Holstein cattle maintained under tropical and subtropical conditions. *Advances in Environmental Biology*. 7(2): 366-372. (Published).
- 2012 35、 **Tahir Usman**, Gang Guo, Syed Muhammad Suhail, Muhammad Subhan Qureshi and Yachun Wang (2012). Estimation of genetic parameters of reproductive and milk yield traits using multiple-trait animal model in Holstein under subtropical conditions. *Journal of Animal and Veterinary Advances* 11 (17): 3132-3139. (Published, IF 0.46).
- 36、 **Usman T.**, G. Guo, S. M. Suhail, S. Ahmed, L. Qiaoxiang, M. S. Qureshi and Y. Wang (2012). Performance traits study of Holstein Friesian cattle under subtropical conditions. *Journal of Animal and Plant Science*. 22(2 Suppl.) 92-95. (Published, IF 0.56).
- 37、 Li D., **T. Usman**, Q. Chu, Y. Wang, L. Zhou, Y. Yu, Y. Zhang, S. L. Zhang,



## Conference Papers

2019

Z. Q. Xie, S. Y. Hou, L. Liu, W. H. Shi (2018). Selection and implementation of SNP markers for parentage analysis in a Chinese crossbred cattle population. *Journal of Animal Breeding & Genetics (Under Review)*.

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- 42、 Tahir Usman, Irfan Khattak, Naimat Ullah Khan, Saira Gul, Sadaf Niaz, Nasreen Adil and Adil Khan. Marker assisted selection is a worthy approach to minimize the risk of mastitis in dairy cattle. **International conference on Dairy Animal Health Challenges, Faisal Abad, Pakistan, PP 16. January 17-18, 2018. (Published)**.

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- 44、 Tahir Usman, Sultan Ayaz, Irfan Khattak, Naimat Ullah Khan, Saira Gul and Atta ur Rehman. Two novel snps in *STAT3* gene are associated with mastitis susceptibility in dairy cattle. *Proc 4<sup>th</sup> Int Workshop on Dairy Sci Park, Univ Agric Peshawar, Pakistan pp 142. Nov 1-5, (2017). (Published)*.
- 45、 Irfan Khattak, M Hassan Mushtaq, Sultan Ayaz, Sajid Ali, Sadeeq Ur Rahman, Javed Muhammad, Haq Amanullah, M Luqman Sohail, Furqan Awan and Tahir Usman. Occurrence of mycobacterium bovis in bovine milk and consumers’ knowledge, attitude and practices toward tuberculosis in peshawar, pakistan. *Proc 4<sup>th</sup> Int Workshop on Dairy Sci Park, Univ Agric Peshawar, Pakistan pp 90. Nov 1-5, (2017). (Published)*.
- 46、 Saira Gul, Sohail Ahmad, Tahir Usman, Sultan Ayaz, Saleha Gul and Shabina Begum. Serological and molecular characterization of *Anaplasma marginale* in cattle in district Peshawar, Khyber Pakhtunkhwa. **International One Health Conference. Jheng, Pakistan PP 90. November 09-10 (2017). (Published)**.
- 47、 Irfan Khattak, Muhammad Hassan Mushtaq, Sultan Ayaz, Javed Muhammad, Muhammad Luqman Sohail, Haq Amanullah, Sajid Ali, Tahir Usman, Asad Ullah, Imad Khan. Assessment of Mycobacterium bovis in bovine milk and knowledge, attitude and practices about tuberculosis in Peshawar, Pakistan. **International One Health Conference. Jheng, Pakistan PP 86. November 09-10 (2017). (Published)**.
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- 51、 **Tahir Usman**, Ying Yu, Sultan Ayaz, Saira Gul, Shabina Begum, Hammad Ullah, Chao Liu, Xiao Wang, Yichun Dong, Yachun Wang. Selection of dairy cattle against mastitis using candidate gene approach. *Proc 3<sup>rd</sup> Int Workshop on Dairy Sci Park, Univ Agric Peshawar, Pakistan pp 31. Nov 16-18, (2015). (Published)*.
- 2014
- 52、 **Tahir Usman**, Yachun Wang, Ying Yu, Chao Liu, Xiao Wang, Yuan Zhang. Association study of single nucleotide polymorphisms in STAT5A/B with mastitis susceptibility in Chinese Holstein cattle. *WCGALP, Vancouver Canada, (2014). (Published)*.
- 53、 **Tahir Usman**, Ying Yu, Yachun Wang, Chao Liu, Xiao Wang, Qin Zhang. Higher methylation of the JAK2 promoter is associated with depressed gene expression in healthy controls and vice versa in mastitis dairy cattle. *ISAG Xi'an, China. P6002, pp 196. (2014). (Published)*.
- 54、 **Tahir Usman**, Ying Yu, Chao Liu, Xiao Wang, Yichun Dong, Yachun Wang. Genetic effect of single nucleotide polymorphisms in LAG-3 gene on mastitis resistance in dairy cattle. *International Conference on Advances in Parasitology and Public Health. Jheng, Pakistan. October (2014). (Published)*.
- 55、 **Tahir Usman**, Ying Yu, Chao Liu, Xiao Wang, Yichun Dong, Yachun Wang (2014). Two novel single nucleotide polymorphisms in JAK2 gene are associated with mastitis resistance in dairy cattle. *1<sup>st</sup> International Conference on Zoonoses. Multan, Pakistan. ICZ 2014-022, pp 25. (2014). (Published)*.
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- 57、 **Tahir Usman**, Ying Yu, Chao Liu, Xiao Wang, Yachun Wang. Genetic Effects of Single Nucleotide Polymorphisms in JAK2, STAT5A and STAT5B Genes on Susceptibility of Chinese Holsteins to Mastitis. Accepted for Oral Presentation in “The 11<sup>th</sup> World Conference on Animal Production”. Abstract No. *WCAP 1-03-005, pp: 66. (2013). (Published)*.
- 58、 **Tahir Usman**, Ying Yu, Chao Liu, Xiao Wang, Muhammad Subhan Qureshi, Yachun Wang. Two novel single nucleotide polymorphisms in promoter of CD4 gene are associated with fat% in Chinese Holstein cattle. *Proc 2<sup>nd</sup> Int Workshop on Dairy Sci Park, Univ Agric, Peshawar, Pakistan pp 133. Nov 18-20, (2013). (Published)*.
- 2011
- 59、 **Tahir Usman**, Livestock Improvement a Major Cooperation Area for Two All-Weather Friends, Proceeding of the Sino-Pak university student’s forum at *Sino-Pak 60<sup>th</sup> friendship anniversary Pecking University, P: 78-83. (2011). (Published)*.

## Researc Projects

1. Genetic and Engineering effects of JAK-STAT pathway related genes on mastitis resistance in dairy cattle. **Approved by HEC as PI (0.05 Million PKR, In Process)**.
2. Evaluation of Tick Protein A candidate of local strain vaccine against vector ticks of babesiosis in cattle. **Approved by HEC (NRPU) in 2016 as Co-PI (3.1 Million PKR, In Process)**.
3. Epidemilogy of parasitic zoonosis in human, canine and feline population. **Approved by HEC (NRPU) in 2018 as Co-PI (4.7 Million PKR, In Process)**.
4. Inter-generational epigenetic transmission of staphylococcus aureus mastitis and functional validation of resistance genes in China & Pakistan dairy cattle. **Approved by PSF as PI (A joint Project between PSF and NSFC (Over 20 Million PKR, In Process)**.

## Students Supervised

### PhD Students

- 1) **Mr. Nawab ALi**, Markers development and risk assesment of mastitis

disease in dairy cattle under sub tropical conditions of Pakistan (**Graduted 2019**).

- 2) **Ms. Sumaira Naz**, Bioinformatics analysis of the dairy cattle for mastitis resistance (**In process 2019-2021**).

#### **Master Students**

- 1) **Ms. Rubab**, AWKUM, Evaluation of the genetic and phenotypic parameters of the performance traits of various dairy cattle breeds in Khyber Pakhtunkhwa (**Graduted 2020**).
- 2) **Mr. Shehryar Khan**, AWKUM, investigating the association of two variants (rs5743899 and rs 3750920) of human tollip gene with cutaneous leishmaniasis. (**Graduted 2020**).
- 3) **Mr. Waqar Ali**, AWKUM, Effect of HCV infection on the expression of human *IFIT1*, *IFIT2* and *CDKN3* genes (**Graduted 2019**).
- 4) **Mr. Niaz Wali**, Genetic evaluation of the dairy herds maintained at Khyber Pakhtunkhwa (**Graduted 2019**).
- 5) **Mr. Saqib Zaib**, AWKUM, Identification of SNPs in exon one and exon four of *CD4* gene and its association with mastitis resistance and production traits in dairy cattle of khyber pakhtunkhwa (**Graduted 2019**).
- 6) **Ms. Huma Rafiq**, AWKUM, Therapeutic potential of stem cells and melatonin for reduction of liver fibrosis (**Graduted 2019**).
- 7) **Mr. Arsalan**, AWKUM, Unraveling single nucleotide polymorphism in promoter of *CD4* and its association with production traits and mastitis traits in dairy cattle (**Graduted 2019**).
- 8) **Ms. Humaira**, AWKUM, Combined effects of stem cells and Beta carotene on the reduction of liver fibrosis (**Graduted 2019**).
- 9) **Mr. Shahid Aziz**, Abdul Wali Khan University Mardan, Genetic architecture of population from Chitral based on mtDNA control region sequences (**Graduted 2019**).
- 10) **Ms. Lubna Riaz**, Abdul Wali Khan University Mardan, Synergetic effects of stem cells and vitamin C for reduction of liver fibrosis (**Graduted 2019**).

#### **Undergraduate Students**

- 1) **Mr. Hayat Ullah**, Prevalence of Aflatoxin B1 in poultry feed and feed ingredients in district Rawalpindi (Completed).
- 2) **Mr. Abid Ahmed**, Serological identification of respiratory diseases of poultry (ND and CRD) in district Rawalpindi (Completed).
- 3) **Mr. Salman**, Post mortem examination of poultry birds in district Rawalpindi (Completed).
- 4) **Mr. Sayed Bilal**, Post mortem examination of animals slaughtered at abattoir in district Lahore.
- 5) **Mr. Ihtesham Yousaf**, Prevalence of parvo virus infection in dogs in Islamabad (Completed).


#### **Reviewer of Journals**

Sarhad Journal of Agriculture, Smith & Franklin, Plant Protection Science Journal, Lasbela University Journal of Science and Technology, Pakistan Veterinary Journal, Pakhtunkhwa Journal of Life Sciences, PLoS One

#### **Editor of Journals**

Veterinary Research and Pets Care, Halal Journal of Malaysia, Abasyn Journal of Life Sciences, Meat Science Journal

#### **Novel SNPs submitted to NCBI**

	<b>Submitter Handle:</b>	<a href="#">NELAB</a>
	<b>Submitter:</b>	<a href="#">Tahir Usman 2014</a>
	<b>Submitter Method ID:</b>	<a href="#">PROTOCOL-A</a>
	<b>Citation:</b>	not supplied
	<b>Population:</b>	TU2
	<b>Comment:</b>	not supplied
	<b>Batch Total SubSNP(ss) Count:</b>	10

SubSNP(ss)	Allele	RefSNP(rs)	Chr	Chr Pos	Contig Acces
<a href="#">ss1052073386</a>	C/T	<a href="#">rs382802804</a>	19	42960341	NW_003104496.1
<a href="#">ss1052073385</a>	C/T	<a href="#">rs43706496</a>	19	42965083	NW_003104496.1
<a href="#">ss1052073391</a>	A/G	<a href="#">rs134369392</a>	5	104001608	NW_003103940.1
<a href="#">ss1052073390</a>	A/G	<a href="#">rs134039112</a>	5	104010167	NW_003103940.1
<a href="#">ss1052073389</a>	C/T	<a href="#">rs109180561</a>	5	104010694	NW_003103940.1
<a href="#">ss1052073388</a>	C/T	<a href="#">rs110774456</a>	5	104010752	NW_003103940.1
<a href="#">ss1052073387</a>	A/G	<a href="#">rs110894017</a>	5	104010804	NW_003103940.1
<a href="#">ss1052073392</a>	A/C	<a href="#">rs110971864</a>	5	104032765	NW_003103940.1
<a href="#">ss1052073384</a>	A/G	<a href="#">rs110298451</a>	8	39645396	NW_003104094.1
<a href="#">ss1052073383</a>	A/G	<a href="#">rs210148032</a>	8	39652267	NW_003104094.1

### Countries Visited

China, Brazil, Germany, Qatar, Turkey, Denmark, Sweden, Czech Republic, England, Ireland and UAE, Sri Lanka