

CURRICULUM VITAE

DR. MIAN MUHAMMAD AWAIS

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CURRENT POSITION

Assistant Professor,
Department of Pathobiology, Faculty of Veterinary Sciences,
Bahauddin Zakariya University, Multan 60800, Pakistan

1. PERSONAL INFORMATION

Father's Name: **Ch. Abdul Ghani**
Date of birth: 16-11-1984
CNIC#: 33100-0847024-5
Nationality: Pakistani
Domicile: Faisalabad (Punjab)
Marital Status: Married
Field of Specialization: Parasitology, Immunology
Total Impact Factor 41.957
Open Researcher and Contributor ID: <http://orcid.org/0000-0002-7802-3259>

2. EDUCATION AND ACADEMIC RECORD

Education	Year of Passing	Marks obtained	Division
PhD (Parasitology)	2013	-	-
M. Phil (Parasitology)	2010	CGPA 4.00/4.00 Silver Medalist	1 st
DVM (5 years)	2008	CGPA 3.83/4.00	1 st
Intermediate, F.Sc. (Pre-medical)	2003	860/1100	1 st
Matriculation	2000	694/850	1 st

3. PROFESSIONAL EXPERIENCE

- ✓ Teaching and research experience as **Assistant Professor**, Department of Pathobiology, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan
- ✓ **(October 01, 2014 to date)**.
- ✓ Teaching and research experience as **Assistant Professor**, Department of Pathobiology, College of Veterinary and Animal Sciences, Jhang Sub-campus University of Veterinary and Animal Sciences, Lahore, Pakistan **(October 01, 2013 to September 30, 2014)**.
- ✓ Teaching and research experience as a **Lecturer**, Department of Pathobiology, College of Veterinary and Animal Sciences, Jhang Sub-campus University of Veterinary and Animal Sciences, Lahore, Pakistan **(July 06, 2012 to September 30, 2013)**.
- ✓ Two years and seven months research experience as a **Research Associate** in a research project entitled “Evaluation of sugar cane polysaccharides and glycoproteins as biological response modifier and their therapeutic effect on *Eimeria* infection in chickens” funded by Pakistan Science Foundation, Islamabad, Pakistan **(December 08, 2009 to July 06, 2012)**.

4. ACADEMIC ADMINISTRATIVE EXPERIENCE

1. **Program Coordinator** (Postgraduate Programs), Department of Pathobiology, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan (March 2015 to date).
2. **Superintendent**, Umar Hall (Boys Hostel), Bahauddin Zakariya University, Multan (2015 to 2017).
3. **Advisor, Punjab Public Service Commission** for the Recruitment of Veterinary Officers/Livestock Production Officers (BS-17) (2016)
4. **Incharge**, One Health Postgraduate Research Lab., Department of Pathobiology, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan (April 2015 to date).
5. **Member/Secretary**, Committee for the Recommendation of Visiting Faculty/Part Time Teachers for Faculty of Veterinary Sciences, BZU, Multan (September 2019 to date).
6. **Assisted, office of the Dean**, Faculty of Veterinary Sciences, for academic affairs (2016 to date)
7. **Member, Board of Faculty of Veterinary Sciences**, Bahauddin Zakariya University, Multan.
8. **Member, Board of Studies, Department of Pathobiology**, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan.
9. **Member, Disciplinary Committee**, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan (15-07-2015 to date).
10. **Member, Faculty Examination Committee**, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan (15-07-2015 to date).
11. **Member, Admission Committee for UG and PG Programs**, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan (15-07-2015 to date).

12. **Member, Synopsis Scrutiny Committee**, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan (06-10-2015 to date).
13. **Member, Postgraduate Seminar Evaluation Committee**, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan (06-09-2018 to date).
14. **Member, Animal Welfare and Ethics Committee**, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan (05-12-2018 to date).
15. **Member, Departmental Purchase Committee**, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan.
16. **Store Incharge**, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan.
17. **Academic Advisor** for DVM Session 2017-22, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan.
18. **Editor, FVS Newsletter**, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan (2015 to date).
19. **Member, 15th Convocation Hall and Seating Arrangement Committee**, BZ University, Multan
20. **Convener, FVS Website Development/Maintenance Committee**, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan.
21. **External Examiner** of M. Phil Biotechnology Thesis and Viva Voce Examination, The Women University, Multan.
22. **External Examiner** of BS Zoology Thesis and Viva Voce Examination, Lahore College for Women University, Lahore.

5. JOURNAL/PUBLICATION EXPERIENCE

a. MEMBER EDITORIAL BOARD

- BMC Veterinary Research (ISI indexed Impact Factor Journal)
(<https://bmcvetres.biomedcentral.com/about/editorial-board>)
- Pakistan Journal of Life and Social Sciences (HEC recognized journal)
(<http://www.pjlss.edu.pk/editorial-board>)
- Journal of Advanced Veterinary and Animal Research
(<http://bdvets.org/JAVAR/javar-index.html>)
- Annals of Veterinary and Animal Science
- Pakistan Veterinary Journal (ISI indexed Impact Factor Journal)
(January 01, 2012 to October 01, 2012)

b. Academic REFEREE

- Molecular Nutrition and Food Research (ISI indexed Impact Factor Journal)
- Acta Tropica (ISI indexed Impact Factor Journal)
- Carbohydrate Polymers (ISI indexed Impact Factor Journal)
- Vaccine (ISI indexed Impact Factor Journal)
- Equine Veterinary Journal (ISI indexed Impact Factor Journal)

- African Journal of Microbiology Research (ISI indexed Impact Factor Journal)
- World's Poultry Science Journal (ISI indexed Impact Factor Journal)
- African Journal of Biotechnology (ISI indexed Impact Factor Journal)
- American Journal of Microbiology Research
- Agricultural Research Journal
- Pakistan Journal of Scientific and Industrial Research (PJSIR)
- Pakistan Journal of Life and Social Sciences (PJLSS)

6. PROFESSIONAL AFFILIATIONS

- **Life-long member**, Pakistan Veterinary Medical Council as Registered Veterinary Medical Practitioner (RVMP-3980).
- **Member**, Pakistan Veterinary Medical Council as Registered Veterinary Medical Faculty (RVMF-0116).
- **Life Member**, Pakistan Biological Safety Association (PBSA)
- **Global Outreach-Contributing Member**, American Society for Microbiology (ASM)
- **Member**, World Association for the Advancement of Veterinary Parasitology
- **Member**, American Society of Tropical Medicine and Hygiene (2018)
- **Member**, American Committee of Molecular, Cellular and Immunoparasitology (2018)
- **Student Member**, Poultry Science Association (2011)
- **Member**, UVAS Alumni Association
- **Member**, UAF Alumni Association

7. AWARDS AND HONORS

a. Awards

- **Awarded Quaid-e-Azam Gold Medal Award** in year 2018 for outstanding Performance in the field of Veterinary Medicine by Tehreek-e-Istehkam-e-Pakistan, Lahore, Pakistan.
- **Excellence Award** by Pakistan Veterinary Medical Association (PVMA) at International Livestock, Dairy and Poultry Congress (ILDPC) on March 16-17, 2016.
- **Excellence Award** by Pakistan Veterinary Medical Association (PVMA) at International Livestock, Dairy & Poultry Congress (ILDPC) on April 14-15, 2015.
- Awarded **Research Productivity Award 2013** by Pakistan Council of Science and Technology, Pakistan
- Won **Best Young Scientist Award-2013** (Veterinary Sciences, 3rd Position) by National Academy of Young Scientists
- **Won International Travel grant** to attend an International training course on Drug development and neglected infectious tropical diseases held in Thailand
- **1st Position (Silver Medalist)** in M. Phil Parasitology (Univ. of Agriculture, Faisalabad)
- **Awarded University merit scholarship holder** throughout the DVM and M.Phil degree programs

b. Honours

- **Invited as one of the fifteen finalists from Pakistan for participation in NASEM, USA** One-Health Research Symposium for training and active learning exercises on One-Health topics, and presentation of shortlisted proposal against One Health Fellowship program for year 2018 at Bangkok, Thailand (July 9-13, 2018).
- **Certificate of Recognition** for qualifying amongst the five finalists in the 2015 Nor-Feed Award for quality of PhD Research Work on detailed description of the plant properties and its nutritional benefits awarded by Nor-Feed, France.
- **HEC Approved Supervisor** by Higher Education Commission, Govt. of Pakistan for supervision of PhD level Students for indigenous PhD Scholarship Schemes vide HEC Notification No. 1-103/HEC/HRD/AGRI/2014/106(1) dated July 13, 2015.
- **Co-Chaired, Technical Session** of One day symposium on Nanomedicine: Current Scenario and future Perspectives organized by Institute of Pharmacy, Physiology and Pharmacology, University of Agriculture, Faisalabad
- **Certificate of appreciation** in recognition of excellent performance as Member, Technical committee in the International Livestock, Dairy and Poultry Congress organized by Pakistan Veterinary Medical Association held at Expo Center, Johar Town, Lahore on April 14-15, 2015.
- **Certificate of appreciation** in recognition of excellent performance as Secretary, Technical committee in the 1st International Conference on Zoonoses-2014 organized by Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan from October 16-17, 2014.
- **Certificate of appreciation** in recognition of excellent performance as a member in the organizing committee of 1st International Conference on Zoonoses-2014 organized by Faculty of Veterinary Sciences at Bahauddin Zakariya University, Multan, Pakistan from October 16-17, 2014.
- **Highest %** in the Faculty Vet. Science among all the post graduate students (Session 2008-10)
- **4th Position** holder in the DVM session 2003-08 in Univ. of Agriculture, Faisalabad.

8. Professional trainings/Workshops/Conferences attended

a. International	-----	06
b. National	-----	26
c. Total (a+b)	-----	31

a. International

1. **Certificate of Completion** of Training Program on Controlling Diseases Outbreaks of especially Dangerous Pathogens by Strengthening One Health strategies in Pakistan **(49.5**

- Contact Hours)** organized by The Centre for Agriculture and Food security and Preparedness, **University of Tennessee, USA** from October 7-14, 2019 at Bali, Indonesia.
2. **Certificate of Participation for successful Completion** of online “**Foot-and-Mouth Disease Laboratory Investigation Training Course**” (12 hours) organized by European Commission for the Control of Foot and Mouth Disease in collaboration with Food and Agricultural Organization held in February 2019 at Pirbright University, UK.
 3. **Certificates of Oral Presentation** at 14th International Congress of Parasitology (ICOPA 2018) held on August 19-24, 2018 at Exco, Daegu, Korea.
 4. **Certificate of Attendance** for participation in **NASEM One-Health Research Symposium** for training and active learning exercises on One-Health topics, and presentation of shortlisted proposal against One Health Fellowship program for year 2018 (July 9-13, 2018) at Bangkok, Thailand.
 5. Certificate of Completion of Training Program on **Isolating Emerging Infectious Pathogens During Disease Outbreaks (27 Contact Hours)** organized by The Centre for Agriculture and Food security and Preparedness, **University of Tennessee, USA** from January 8-11, 2018 at Bangkok, Thailand.
 6. **Certificate of successful completion** of an **International Training Course** on Drug development and neglected infectious tropical diseases held on 27-31 May 2013 at Biotech, NSTDA, Thailand.

b. National

1. **Certificate of Participation** in two days hands on Training Workshop on **Bioinformatics in Zoonoses Diagnostics** held at College of Veterinary and Animal sciences Jhang, Pakistan (September 26-27, 2019).
2. **Award of Completion** for successfully completing 4 days **One Health In-person Training Program** under ASM 52 Weeks Biosafety Fellowship Program held at COMSTECH Secretariat, Islamabad (September 13-16, 2019).
3. **Award of Completion** for successful completion of **Bio Prism Laboratory Safety Training Initiative Program** organized by Pakistan Biological Safety Association in collaboration with NIH, Fogarty, USA at Margala Hotel, Islamabad, Pakistan (April 24-28, 2018).
4. **Certificate of Participation** in International Livestock, Dairy & Poultry Congress, Aiwan-e-Iqbal Complex, Lahore, Pakistan (March 19-20, 2018).
5. Certificate of Participation for successfully completing one day training workshop on **Biosafety in Public Health Laboratories in the Eastern Mediterranean Region: Train the Trainers Course** organized by CHK in collaboration with WHO at Bahauddin Zakariya University, Multan, Pakistan (December 18, 2017).
6. **Certificate of Participation** in 11th International Biennial Conference of Pakistan Society for Microbiology on Applied Microbial Genomics held at Bahauddin Zakariya University, Multan, Pakistan (December 18-20, 2017).

7. **Award of Completion** for successful completion of **Train the Trainer workshop on Bio Prism Laboratory Safety Training Initiative Program** organized by Pakistan Biological Safety Association in collaboration with NIH, Fogarty, USA at Margala Hotel, Islamabad, Pakistan (March 26-28, 2017).
8. **Certificate of Appreciation** for contributing in one day workshop on **Training Modules of DVM Internees** organized by Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan (January 19, 2017).
9. **Certificate of Participation** in Joint Pakistan-U.S. Workshop on **Strengthening & Sustaining a Network of Public & Animal Health Clinical Laboratories in Pakistan** held on September 27-29, 2016 at Pakistan Academy of Sciences, Islamabad, Pakistan.
10. **Certificate of Participation** in National Workshop, **“Organic Food and Health: Avenues of Innovation and Entrepreneurship”** organized by Pakistan Council for Science and Technology on August 29, 2016 at University of Management and technology, Lahore, Pakistan.
11. **Certificate of Participation** in **Training Course of Medical Journal Editors (CME 12 Hours)** organized by University of Health Sciences, Lahore in collaboration with Pakistan Association of Medical Editors on March 04-05, 2016.
12. **Certificate of Appreciation** for active participation in one day workshop on Training Modules of DVM Internees organized by Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan December 17, 2015.
13. **Certificate of Participation** in National Conference on Insight of Molecular Techniques Used in Applied Biological Research organized by Department of Molecular Biology, Virtual University of Pakistan, Lahore on August 06, 2015.
14. **Certificate of Participation** for participating in the seminar on Rangelands in Pakistan: Status, Potential, Opportunities and Tools/Measures for its Improvement organized by Department of forestry and Range management, BZU in collaboration with NARC/PARC, ILRI and ICARDA Bahauddin Zakariya University, Multan, Pakistan April 28-29, 2015.
15. **Certificate for attending** one day workshop on Bio-safety in Pakistan-Challenges and Solutions organized by Department of Food Science in collaboration with American Society for Microbiology on November 24, 2014.
16. **Certificate of Participation** in two-day workshop on **Scientific Communication** organized by ORIC, GC University, Faisalabad on April 07-08, 2014.
17. **Certificate of Participation** in International Livestock, Dairy & Poultry Congress, Awan-e-Iqbal Complex, Lahore, Pakistan, 11-12 March 2014.
18. **Certificate of participation** in an International Workshop on Advances in Food Analytical Methods: Oils/Fats and Phenolics organized by OIC at COMSTECH, Islamabad from December 4th-6th, 2013.
19. **Certificate of attending** International Livestock, Dairy and Poultry Congress held on 17th - 18th April 2013 at Awan-e-Iqbal, Lahore, Pakistan
20. **Certificate of participation** in International Poultry Expo 2013 from 26-28 September at Expo Center, Lahore, Pakistan

21. **Certificate of participation** in a training workshop on Applications of EndNote X5 Software held on 5-6 April 2013 at CVAS, Jhang, Pakistan.
22. **Certificate of participation and completion** of 5 Days Workshop on Data Analysis Methodologies, held on December 18-22, 2012 at UVAS, Lahore, Pakistan.
23. **Certificate of participation** in a 2 day “Student Forum” held under the Agriculture Sector Linkages Program of Australia & Pakistan in a Dairy Project held at University of Veterinary and Animal Sciences, Lahore from February 20th -21st, 2012.
24. **Certificate of Participation** in a 3-day workshop on “Biosafety Practices: Need and Necessity” organized by OIC at COMSTECH, Islamabad from 26-09-2011 to 28-09-2011.
25. **Certificate of Participation** in one day training workshop on Biosafety organized by National Academy of Young Scientists, Pakistan held at University of Lahore on 9th July, 2011.
26. **Certificate for attending** a Five days training workshop on “LCMS, GCMS & AAS; The Powerful analytical techniques” organized by National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad from April 25 - 29, 2011.
27. **Certificate of Participation** on successful completion of 100 hours intensive workshops/Trainings/Meetings on Novel/International approaches for Diagnosis and control of Parasites held at Univ. of Agriculture, Faisalabad from 29-12-2010 to 08-01-2011.
28. **Certificate of Appreciation** in a 3 day “University Student Forum” held under the Agriculture Sector Linkages Program of Australia & Pakistan in a Dairy Project held at University of Veterinary and Animal Sciences, Lahore from 10-02-2009 to 12-02-2009.

9. PROFESSIONAL TRAININGS/WORKSHOPS/EVENTS ORGANIZED

a. International	-----	07
b. National	-----	11
c. Total (a+b)	-----	18

a. International

1. **Secretary, 2nd International Conference on Zoonoses-2016** organized by Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan (October 20-21, 2016).
2. **Member, Scientific Committee, International Congress on Advances in Veterinary Sciences & Technics** organized by Aksaray University, Turkey in collaboration with Univerzitetu u Sarajevu at Bosnia and Herzegovina (August 25-27, 2016).
3. **Secretary/Member, Technical Review Committee, International Livestock, Dairy & Poultry Congress**, Expo Centre, Johar Town, Lahore, Pakistan (March 16-17, 2016).
4. **Organizer**, three days training program on “**Input services on animal health care, feed and fodder supplies and marketing**” organized by Faculty of Veterinary Sciences (FVS) in collaboration with **International Livestock Research Institute (ILRI) and International**

Center for Agriculture Research in the Dry Areas (ICARDA) held at FVS, BZU, Multan (January 26-29, 2016).

5. **Member**, Technical Committee, **International Livestock, Dairy & Poultry Congress**, held at Expo Centre, Johar Town, Lahore, Pakistan (April 14-15, 2015).
6. **Member**, Technical Committee, **International Livestock, Dairy & Poultry Congress**, Aiwane-Iqbal Complex, Lahore, Pakistan (March 11-12, 2014).
7. **Secretary-Scientific Committee/ Member-Organizing Committee**, **1st International Conference on Zoonoses-2014** organized by Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan (October 16-17, 2014).

b. National

1. **Organizer**, **FVS Sports Gala** organized by Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan (March 19-21, 2019).
2. **Organizer**, 4th National one day workshop on **Developing/Updating Training Modules of DVM Internship Program** organized by Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan (February 14, 2019).
3. **Organizer**, **World Egg Day** at Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan (October 12, 2018).
4. **Secretary**, Technical Session on Livestock and Poultry sector. Duniya Kisan Dost Mela held at Bahauddin Zakariya University, Multan (March 30 to April 01, 2018)
5. **Organizer**, 3rd National workshop on **Developing/Updating Training Modules of DVM Internship Program** organized by Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan (January 25, 2018).
6. **Organizer**, **World Egg Day** at Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan (October 13, 2017).
7. **Organizer**, One day workshop on **Training Modules of DVM Internees** organized by Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan (January 19, 2017).
8. **Master Trainer** in **PARA-VETS TRAINING PROGRAM** organized by Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan-Pakistan funded by IFAD-Assisted Southern Punjab Poverty Alleviation Project (SPPAP), Planning & Development Department, Government of the Punjab-Pakistan (May 2016- May 2017).
9. **Organizer**, One Day Workshop on “**Intellectual Property Rights and Patent Drafting**” a joint venture of Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan and PASTIC-Pakistan Science Foundation held at FVS, BZU, Multan (May 11, 2016).
10. **Organizer**, One day workshop on **Training Modules of DVM Internees** organized by Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan (December 17, 2015).

11. **Organizer, Inauguration Ceremony, Faculty of Veterinary Sciences Complex** at Bahauddin Zakariya University, Multan, Pakistan (September 16, 2015).

10. RESEARCH EXPERIENCE

PhD Thesis Research

Evaluation of sugar cane (*Saccharum officinarum*) bio-molecules as biological response modifiers and their immunotherapeutic effects against coccidiosis in chicken

M.Phil Thesis Research

Immunomodulatory effects of some sugarcane (*Saccharum officinarum*) components in chickens and their therapeutic efficacy against avian coccidiosis

a. RESEARCH GRANTS

1. **Principal Investigator** “Evaluation of combined dietary supplementation of locally available bentonite clay and distillery sludge on the prevention of ochratoxicosis in broiler birds” funded by HEC, Govt. of Pakistan.
2. **Principal Investigator** “Evaluation of *Chenopodium quinoa* as a natural biological response modifier and its protective efficacy against coccidiosis in broilers”. funded by BZU, Multan.
3. **Co-Principal Investigator** “Evaluation of indigenous yeast derived β -glucans as native immunomodulators and antibiotic alternatives against enteric pathogens in industrial broilers: A wise approach towards the control of antimicrobial resistance” funded by HEC (3.44 Million).
4. **Co-Principal Investigator** “Sero- and molecular detection of Avian Influenza in backyard Poultry of district Multan, Pakistan” funded by HEC, Govt. of Pakistan.
5. **Principal Investigator** “Sero- and molecular epidemiological studies on Brucella species circulating in ruminant and human populations of Southern Punjab, Pakistan: A One Health Perspective Submitted to ALP, PARC, Pakistan (shortlisted after technical review).

Other Funding / Grants

1. **Deputy Coordinator**, “Evaluation and certification of rural women trainees on livestock management” funded by Initiative for Change, Multan, Pakistan

b. SCIENTIFIC PUBLICATIONS

i.	Impact Factor (IF) Publications	-----	37
ii.	HEC Recognized Publications	-----	10
	Total (i+ii)	-----	47

i. Internationally Indexed Impact Factor Publications (Total Impact factor 41.957)

Sr. No.	Manuscript Details	IF
1.	Awais MM , M Akhtar, F Muhammad, AU Haq and MI Anwar, 2011. Immunotherapeutic effects of some sugar cane (<i>Saccharum officinarum</i> L.) extracts against coccidiosis in industrial broiler chickens. <i>Experimental Parasitology</i> , 128(02): 104-110.	2.122
2.	Awais MM , M Akhtar, Z Iqbal, F Muhammad, MI Anwar, 2012. Seasonal prevalence of coccidiosis in industrial broiler chickens in Faisalabad, Punjab-Pakistan. <i>Tropical Animal Health and Production</i> , 44(02): 323-328.	1.09
3.	Awais MM and M Akhtar, 2012. Evaluation of some sugarcane (<i>Saccharum officinarum</i> L.) extracts for immunostimulatory and growth promoting effects of in industrial broiler chickens. <i>Pakistan Veterinary Journal</i> , 32(03): 398-402.	1.365
4.	Akhtar M, MI Anwar, Z Iqbal, F Muhammad, MM Awais , AU Haq and EH Sawicka, 2012. Immunological evaluation of two local isolates of <i>Eimeria tenella</i> gametocytes against coccidiosis in poultry. <i>Pakistan Veterinary Journal</i> , 32(01): 77-80.	1.365
5.	Akhtar M, A Hai, MM Awais , Z Iqbal, F Muhammad, AU Haq and MI Anwar, 2012. Immunostimulatory and protective effects of <i>Aloe vera</i> against coccidiosis in industrial broiler chickens. <i>Veterinary Parasitology</i> , 186(3-4): 170-177.	2.381
6.	Akhtar M, AF Tariq, MM Awais , Z Iqbal, F Muhammad, M Shahid and E Hiszczynska-Sawicka, 2012. Studies on wheat bran Arabinoxylan for its immunostimulatory and protective effects against avian coccidiosis. <i>Carbohydrate Polymers</i> , 90(01): 333-339.	3.479
7.	Muhammad F, M Akhtar, IJ Hassan, ZU Rehman, MM Awais , MK Saleemi and MI Anwar, 2012. Quantitative Structure activity relationship and risk analysis of some pesticides in cattle milk. <i>Pakistan Veterinary Journal</i> , 32(04): 589-592.	1.365
8.	Muhammad F, MM Awais , M Akhtar and MI Anwar, 2013. Quantitative Structure activity relationship and risk analysis of some pesticides in cattle milk. <i>Iranian Journal of Environmental Health Science & Engineering</i> , 10: 04.	1.012
9.	Iqbal Z, ZU Rahman, F Muhammad, T Khaliq, H Anwar, MM Awais and S Sadaf, 2013. Oxytocin induced oxidative stress in lactating <i>Bubalis bubalis</i> (Nili Ravi). <i>BMC Veterinary Research</i> , 9: 169.	1.743
10.	Kashif M, T Ahmad, A Shakoor, MY Rana, MM Awais , SA Muhammad, A Yousaf, M Yaqoob, Z Iqbal, A Nasir and ME Baber, 2013. Comparative Efficacy of enrofloxacin and oxytetracycline as systemic dry period therapy for the control of <i>Bubaline</i> mastitis. <i>Buffalo Bulletin</i> , 32(Special Issue 2): 1002-1008.	0.060
11.	Kaleem QM, M Akhtar, MM Awais , M Saleem, M Zafar, Z Iqbal, F Muhammad and MI Anwar, 2014. Studies on <i>Emblia officinalis</i> derived tannins for its immunostimulatory and protective activities against coccidiosis in industrial broiler	1.219

	chickens. The Scientific World Journal, 2014: 378473.	
12.	Nadeem M, A Yousaf, Z Iqbal, MM Awais and BA Pervez, 2014. Prevalence, diagnosis and treatment of mycoplasmosis in game birds. World's Poultry Science Journal, 70(01): 69-80.	1.089
13.	Razzaq A, K Ashraf, A Maqbool, M Islam, A Hannan, MM Awais , MA Khetran, S Jan, M Shafee, M Essa and H Kakar, 2014. Epidemiology, sero-diagnosis and therapeutic studies on nematodes infection in Balochi range-sheep at district Quetta, Balochistan, Pakistan. Iranian Journal of Parasitology, 9(02): 169-180.	0.857
14.	Awais MM , M Akhtar, Z Iqbal and F Muhammad, 2014. <i>Saccharum officinarum</i> derived high molecular mass glycoproteins as native biological response modifiers in chickens. Pakistan Veterinary Journal, 34(04): 464-468.	1.392
15.	Akhtar M, AA Ahmed, MM Awais , MK Saleemi, K Ashraf and EH Sawicka, 2014. Seroprevalence of <i>Toxoplasma gondii</i> in the backyard chickens of the rural areas of Faisalabad, Punjab, Pakistan. International Journal of Agriculture and Biology, 16: 1105-1111.	0.808
16.	MA Zaman, M Sajid, A Sikandar, TU Rehman and MM Awais , 2014. Point Prevalence of Gastrointestinal Helminths and their Association with Sex and Age of Buffaloes in Lower Punjab, Pakistan. International Journal of Agriculture and Biology, 16: 1229-1231.	0.808
17.	Javed M, F Rizvi, AW Manzoor, MM Awais , RSA Khan and AUH Khan, 2014. Comparative evaluation of conventional and molecular diagnostic methods for Newcastle disease during an Outbreak in Punjab, Pakistan. Pakistan Journal of Agricultural Sciences, 51(3): 701-707.	1.049
18.	Iqbal Z, ZU Rahman, F Muhammad, M Akhtar, MM Awais , T Khaliq, A Nasir, M Nadeem, K Khan, HM Arshad and MA Basit, 2015. Effect of oxytocin on serum biochemistry, liver enzymes and metabolic hormones in lactating Nili Ravi buffaloes. Tropical Animal Health and Production, 47(01): 21-27.	0.870
19.	Akhtar M, MM Awais , MI Anwar, S Ehtisham-ul-Haque, A Nasir, MK Saleemi and K Ashraf, 2015. The effect of infection with mixed <i>Eimeria</i> species on hematology and immune responses following Newcastle disease and Infectious bursal disease booster vaccination in broilers. Veterinary Quarterly, 15(01): 21-26.	1.047
20.	Ehtisham-ul-Haque S, SU Rahman, MI Khan, M Younus, MM Awais and A Nasir, 2015. A simplified duplex real-time PCR incorporating TaqMan minor groove binder (MGB) probes and exogenous internal positive control for the simultaneous detection of <i>Mycoplasma gallisepticum</i> and <i>Mycoplasma synoviae</i> isolates from chickens. Veterinarni Medicina, 60(05): 268-273.	0.560
21.	Ullah MI, M Akhtar, Z Iqbal, M Shahid and MM Awais , 2015. Immunomodulating and Antiprotozoal Effects of Different Extracts of the Oyster Culinary-Medicinal Mushroom <i>Pleurotus ostreatus</i> (Higher Basidiomycetes) Against Coccidiosis in Broiler. International Journal of Medicinal Mushrooms, 17(03): 309-317.	1.357
22.	Raza A, F Muhammad, S Bashir, MI Anwar, MM Awais , M Akhtar, B Aslam, T Khaliq and MU Naseer, 2015. Antiviral and immune boosting activities of different	0.974

	medicinal plants against Newcastle disease virus in poultry. World's Poultry Science Journal, 71(03): 523-532.	
23.	Waheed M, F Muhammad, I Javed, M Akhtar, MK Saleemi, T Khaliq, MM Awais and MI Anwar, 2015. Dermatoprotective effects of some plant extracts (genus Ficus) against experimentally induced toxicological insults in rabbits. Toxicology and Industrial Health, 31(11): 982-989.	1.688
24.	Abbas Y AW Sahota, M Akram, S Mehmood, J Hussain, M Younus, MM Awais and AR Sial. 2015. Effect of different feed restriction regimes on growth performance and economic efficiency of Japanese quails. Journal of Animal and Plant Sciences, 25(04): 966-970.	0.422
25.	Anwar MI, F Muhammad, MM Awais and M Akhtar, 2017. A review of β -glucans as a growth promoter and antibiotic alternative against enteric pathogens in poultry. World's Poultry Science Journal, 73(03): 651-661.	0.974
26.	Rizwan HM, M Akhtar, Z Iqbal, MM Awais and MI Anwar, 2017. Evaluation of <i>Avena sativa</i> derived arabinoxylans as native biological response modifiers in broilers. International Journal of Agriculture and Biology, 19(04): 834-840.	0.758
27.	Khaliq K, M Akhtar, MM Awais and MI Anwar, 2017. Evaluation of immunotherapeutic effects of <i>Aloe vera</i> polysaccharides against coccidiosis in chicken. Kafkas Universitesi Veteriner Fakultesi Dergisi, 23(06): 895-901.	0.452
28.	Ullah MI, M Akhtar, MM Awais , MI Anwar and K Khaliq, 2018. Evaluation of immunostimulatory and immunotherapeutic effects of tropical mushroom (<i>Lentinus edodes</i>) against eimeriasis in chicken. Tropical Animal Health and Production, 50(1): 97-104.	1.089
29.	Navid MT, UI Farooq, AI Latif, MM Awais , MI Anwar, M Akhtar and AB Zahur, 2018. Prevalence of foot and mouth disease virus in apparently healthy buffaloes brought to Islamabad slaughterhouse in Pakistan. Tropical Biomedicine, 35(1): 161-167.	0.418
30.	Awais MM , M Akhtar, MI Anwar and K Khaliq, 2018. Evaluation of <i>Saccharum officinarum</i> L. bagasse-derived polysaccharides as native immunomodulatory and anticoccidial agents in broilers. Veterinary Parasitology, 249: 74-81.	2.009
31.	Akhtar M, M Humayun, Z Iqbal, MM Awais and MI Anwar, 2018. Evaluation of biological response modifying and immunotherapeutic activities of barley derived arabinoxylans against coccidiosis in commercial broilers. Turkish Journal of Veterinary and Animal Sciences, 42(1): 55-64.	0.513
32.	Ahmad S, A Khaliq, TN Pasha, S Mehmood, K Hussain, S Ahmad, B Rasheed, MM Awais and SA Bhatti, 2018. Influence of feeding <i>Moringa oleifera</i> pods as phytogenic feed additive on performance, blood metabolites, chemical composition and bioactive compounds of breast meat in broiler. Kafkas Universitesi Veteriner Fakultesi Dergisi, 24(2): 195-202.	0.411
33.	Ullah MI, M Akhtar, MM Awais , MI Anwar and K Khaliq, 2018. Immunological and anti- <i>Eimeria</i> effects of hot water and methanolic extracts of <i>Pleurotus sajor-caju</i> in broiler. Kafkas Universitesi Veteriner Fakultesi Dergisi, 24(6): 893-898.	0.411

34.	Ullah MZ, MM Awais , M Akhtar, MI Anwar, MT Navid, I khan and A Razzaq, 2018. Seroprevalence, associated risk factors and hematological impacts of toxoplasmosis in small ruminants of Multan, Punjab-Pakistan. Tropical Biomedicine, 35(4): 1028-1040.	0.418
35.	Ahmad A, AA Anjum, M Rabbani, K Ashraf, MM Awais , M Nawaz, N Ahmad, A Asif and S Sana, 2019. Effect of fermented rice bran on growth performance and bioavailability of phosphorus in broiler chickens. Indian Journal of Animal Research, 53(3): 361-365.	0.437
36.	Anwar MI, MM Awais , M Akhtar, MT Navid and F Muhammad, 2019. Nutritional and immunological effects of nano-particles in commercial poultry birds. World's Poultry Science Journal, 75 (02), 261-272.	1.364
37.	Awais MM , MA Jamal, M Akhtar, MR Hameed, MI Anwar and MI Ullah, 2019. Immunomodulatory and ameliorative effects of Lactobacillus and Saccharomyces based probiotics on pathological effects of Eimeriasis in broilers. Microbial Pathogenesis, 126(1): 101-108.	2.581

ii. HEC Recognized/Scopus Indexed Publications

Sr. No.	Manuscript Details
1.	Bibi F, S Qaisrani, M Ayaz, M Nazir, A Ahmad, MM Awais , B Khan and M Akhtar, 2018. Occurrence of endoparasites in some selected fishes of Chenab river, Pakistan. Bangladesh Journal of Zoology, 46(1), 53-61.
2.	Akhtar M, E Hisczynska-Sawicka, MM Awais , MI Anwar and M Stankiewicz, 2016. Simplified RNA Extraction from <i>Trichostrongylus</i> Infected Sheep Blood to Amplify Ovine Interleukin-6 Gene. Pakistan Journal of Life and Social Sciences, 14(01): 57-59.
3.	Ali MA, LA Lodhi, MM Awais , Faiz-ul-Hassan and W Ahmad, 2016. Effect of birth weight and sex of the calf on incidence of calving disorders in buffaloes in Punjab province, Pakistan (a case study). Science International, 28(3): 3179-3182.
4.	Muhammad SA, A Shakoor, M Younus, MM Awais , M Kashif, MK Maan, MR Hameed and MS Akhtar, 2015. Surgical Rectification of Congenital Type II Atresia ani Leading to Recto-Vaginal Fistula in Cattle Calves. Pakistan Journal of Life and Social Sciences, 13(01): 62-63.
5.	Farooq AA, MH Lashari, MS Akhtar, MM Awais , S Inayat and M Akhtar, 2015. Prevalence of Bovine Fascioliasis in Different Commercial and Non-commercial Dairy Farms of District Rajanpur, Punjab, Pakistan. Pakistan Journal of Life and Social Sciences, 13(01): 8-11.
6.	Nazir KHMNH and MM Awais , 2014. Expression Profiles of Fungal Cytochrome P450 Genes: A Mini Review. Journal of Pure and Applied Microbiology, 8(01): 81-87.
7.	Awais MM , M Akhtar, Z Iqbal and F Muhammad, 2013. <i>Saccharum officinarum</i> derived mid molecular mass glycoproteins as native biological response modifiers in

	chickens. Pakistan Journal of Life and Social Sciences, 11(03): 200-207.
8.	Mukhtar M, MM Awais , MI Anwar, Z Hussain, N Bhatti and S Ali, 2012. Pathogenicity and effect of exogenous antibodies on the viability of <i>Mycoplasma gallisepticum</i> in chicken Embryos, Pakistan Journal of Life and Social Sciences, 10(01): 13-17.
9.	Mukhtar M, MM Awais , MI Anwar, Z Hussain, N Bhatti and S Ali, 2012. Seroprevalence of <i>Mycoplasma gallisepticum</i> among commercial layers in Faisalabad, Pakistan. Journal of Basic and Applied Sciences, 08: 183-186.
10.	Imtiaz F, M Akhtar, MM Awais , F Muhammad and H Jamil, 2011. Standardization and application of modified counter immuno-electrophoresis for the detection of antigenic response against <i>Haemonchus contortus</i> in rabbits. Pakistan Journal of Life and Social Sciences, 09(01): 13-16.

c. ABSTRACTS PUBLISHED

1. **Awais MM**, MZ Ullah M Akhtar, MI Anwar, MT Navid, I khan and A Razzaq, 2018. Seroprevalence, associated risk factors and hematological impacts of toxoplasmosis in small ruminants of Multan, Punjab-Pakistan. 14th International Congress of Parasitology held on August 19-24, 2018 at Exco, Daegu, Korea.
2. M Akhtar, S Mumtaz, **MM Awais**, MI Anwar and MI Ullah, 2018. Evaluation of biological response modifying and immunotherapeutic effects of *Ficus religiosa* derived extracts against coccidiosis in chickens. 14th International Congress of Parasitology held on August 19-24, 2018 at Exco, Daegu, Korea.
3. Ali MA, **MM Awais**, FU Hassan, W Ahmad, R Dilshad, E Ahmad and N Ijaz, 2018. Studies on effect of asphalt on semen quality and freezability of Lohi rams. The 55th Annual Meeting of the Society of Cryobiology held on July 10-13, 2018 at Madrid, Spain.
4. Fayyaz A, MK Saleemi, SU Rehman, A Fayyaz, MN Naseem, **MM Awais** and UH Khan, 2017. Major fungus infections and their control in Pakistan. 10th International Conference on Clinical Virology, Fungal Infections & Infectious Diseases held on December 4-5, 2017, Dubai, UAE, Journal of Virology and Antiviral Research, 6: 4.
5. Rauf N, M Akhtar, MA Hafeez, MK Saleemi and **MM Awais**, 2017. Effect of *Embllica officinalis* derived tannins on cell mediated immune response and their protective efficacy against coccidiosis in chickens. International parasitology Conference held on October 25-26, 2017 at University of Veterinary and Animal Sciences, Lahore, Pakistan.
6. Tariq M and **MM Awais**, 2016. Role of dairying in food sovereignty in Pakistan. International Livestock, Dairy and Poultry Congress (ILDPC) held at Expo Centre, Johar Town, Lahore on 16-17 March 2016.
7. Ali MA, LA Lodhi, M Akhtar, **MM Awais**, MR Hameed, H Anwar, W Ahmad, AR Khalid, Z Iqbal and A Fayyaz, 2016. Effect of organic metabolites on dystocia in riverine buffaloes of Pakistan. International Livestock, Dairy and Poultry Congress (ILDPC) held at Expo Centre, Johar Town, Lahore, Pakistan (March 16-17, 2016).

8. Lashari MH, A Ehsan, N Sial, S Naqvi, MS Akhtar, AA Farooq, MM Ayaz, **MM Awais** and **M Akhtar**, 2016. Cystic echinococcosis of slaughtered ruminants in Bahawalpur municipal abattoir, Punjab, Pakistan. International Livestock, Dairy and Poultry Congress (ILDPC) held at Expo Centre, Johar Town, Lahore, Pakistan (March 16-17, 2016).
9. Hameed MR, MZ Khan, M Akhtar, MK Saleemi, **MM Awais**, S Ahmad, AR Khalid, E Ahmad, Z Iqbal and MA Ali, 2016. Immunopathological consequences of ochratoxicosis and associated effects on oxidative parameters in day old broilers. International Livestock, Dairy and Poultry Congress (ILDPC) held at Expo Centre, Johar Town, Lahore, Pakistan (March 16-17, 2016).
10. Nazir MM, M Akhtar, A Maqbool, K Ashraf, **MM Awais**, G Yasin, MS Nabeel, AN Ahmad, DS Lindsay, 2016. Prevalence of Neospora caninum antibodies in the serum of camels (*Camelus dromedarius*) at Rakh Mahni from Bhakkar, Pakistan. International Livestock, Dairy and Poultry Congress (ILDPC) held at Expo Centre, Johar Town, Lahore on 16-17 March 2016.
11. Raza M, S Bashir, MI Anwar, F Muhammad, **MM Awais** and M Akhtar, 2016. Effects of nano-particles on the productivity of commercial poultry birds: A review. International Livestock, Dairy and Poultry Congress (ILDPC) held at Expo Centre, Johar Town, Lahore on 16-17 March 2016.
12. Ullah MI, M Akhtar and **MM Awais**, 2016. Immunological and anti-eimeria activities of hot water and methanol extracts of *Pleurotus sajor-caju* in broiler. International Poultry Scientific Forum, Concurrent Meeting of The Southern Poultry Science Society 37th Annual Meeting and The Southern Conference on Avian Diseases 57th Annual Meeting held at Georgia, USA on January 25-26, 2016.
13. Anwar MI, F Muhammad, A Raza, **MM Awais** and M Akhtar, 2016. One health approach to prevent food-borne Salmonellosis: A review. 2nd International Conference on Zoonoses-2016, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan, 20-21 October 2016.
14. Lashari MH, S Naqvi, N Sial, Z Tasawar, MS Akhtar, M Ayaz, AA Farooq, SS Zahra and **MM Awais**, 2016. First report on incidence of Giardia infection in cholistani calves of the river Sutlej areas, Bahawalpur, Pakistan. 2nd International Conference on Zoonoses-2016, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan, 20-21 October 2016.
15. Nadeem A, T Ahmad, M saqib, MI Ullah, MM Awais, MR Hameed and AR Khalid, 2016. Sero-prevalence of equine brucellosis in five districts of Punjab province of Pakistan. 2nd International Conference on Zoonoses-2016, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan, 20-21 October 2016.
16. Tariq M, MM Awais, P Akhtar, SU Rehman and A Hameed, 2016. Poultry health hazards and their zoonotic implications. 2nd International Conference on Zoonoses-2016, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan, 20-21 October 2016.
17. Anjum S, I Khan, A Shakoor, M Younus, K Muhammad, S Ali, **MM Awais**, A Nasir and H El-Adawy, 2016. Seroepidemiology of brucellosis in pregnant and women presented with

- abortion in rural and urban areas in three selected districts of Punjab province, Pakistan. 2nd International Conference on Zoonoses-2016, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan, 20-21 October 2016.
18. Akhtar M, HM Rizwan and **MM Awais**, 2015. *Avena sativa* derived arabinoxylans as native biological response modifiers in chicken. 29th EFFoST International Conference, Athens, Greece, November 10-12, 2015.
 19. **Awais MM** and M Akhtar, 2015. Evaluation of biological response modifying activities of sugar cane bagasse derived polysaccharides in chickens. 29th EFFoST International Conference, Athens, Greece, November 10-12, 2015.
 20. Akhtar M, **MM Awais** and A Jamil, 2015. Immunotherapeutic effects of *Saccharum officinarum* derived mid molecular mass glycoproteins against coccidiosis in broiler chickens. International Livestock, Dairy & Poultry Congress, Expo Centre, Lahore, Pakistan, 14-15 April 2015.
 21. Ehtisham-ul-Haque S, U Waheed, **MM Awais**, A Nasir and MK Rafique, 2014. Loop-mediated isothermal amplification (LAMP) assay: a powerful inovative diagnostic tool for the rapid molecular detection of zoonotic pathogens in developing countries. 1st International Conference on Zoonoses-2014, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan, 16-17 October 2014.
 22. Akhtar M, AA Ahmed, **MM Awais**, MI Anwar, MK Saleemi, K Ashraf and E Hiszczynska-Sawicka, 2014. Seroprevalence of *Toxoplasma gondii* in the backyard chickens of the rural areas of Faisalabad, Punjab, Pakistan. 1st International Conference on Zoonoses-2014, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan, 16-17 October 2014.
 23. Hussain T, N Chaudhry, **MM Awais**, B Aslam, M Arshad and M Adil, 2014. Seroprevalence of brucellosis among the indigenous breeds of buffaloes in urban, peri urban and randomly selected villages of district Pakpattan, Pakistan. 1st International Conference on Zoonoses-2014, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan, 16-17 October 2014.
 24. Chaudhry N, T Hussain, B Aslam, MK Rafique and **MM Awais**, 2014. Study on sero-prevalence of brucellosis among the buffaloes and cattle in urban, peri urban and rural areas of district Mandibahuddin, Pakistan. 1st International Conference on Zoonoses-2014, Faculty of Veterinary Sciences, Bahauddin Zakariya University, Multan, Pakistan, 16-17 October 2014.
 25. **Awais MM** and M Akhtar, 2014. Biological response modifying and immunotherapeutic activities of sugar cane bagasse derived fatty acids against coccidiosis in industrial broiler chickens. The 10th Asia Pacific Poultry Conference, ICC Jeju, Korea, October 19-23, 2014.
 26. Iqbal Z, ZU Rahman, M Akhtar, T Khaliq, **MM Awais**, A Nasir, M Nadeem and M Kashif, 2014. Effect of oxytocin on serum biochemistry, liver enzymes and metabolic hormones in lactating Nili Ravi buffaloes. International Livestock, Dairy & Poultry Congress, Aiwan-e-Iqbal Complex, Lahore, Pakistan, 11-12 March 2014.
 27. Muhammad SA, A Shakoor, M Younus, MR Hameed, **MM Awais**, M Kashif, MK Maan and MS Akhtar, 2014. Surgical rectification of congenital type II *Atresia ani* leading to recto-

- vaginal fistula in two cow calves. International Livestock, Dairy & Poultry Congress, Aiwan-e-Iqbal Complex, Lahore, Pakistan, 11-12 March 2014.
28. **Awais MM**, M Akhtar, F Muhammad, A Jamil, Z Iqbal, MA Zaman, S Ehtisham-ul-Haque and MR Hameed, 2014. *Saccharum officinarum* derived high molecular mass glycoproteins as native BRMs in broiler chickens. International Livestock, Dairy & Poultry Congress, Aiwan-e-Iqbal Complex, Lahore, Pakistan, 11-12 March 2014.
 29. Zaman MA, Z Iqbal, M Younus, S Ehtish-ul-Haque and **MM Awais**, 2014. Evaluation of anti-coccidial activity of a herbal extract against caecal coccidiosis. International Livestock, Dairy & Poultry Congress, Aiwan-e-Iqbal Complex, Lahore, Pakistan, 11-12 March 2014.
 30. Javed M, F Rizvi, AW Manzoor, **MM Awais**, RSA Khan and AUH Khan, 2014. Validity of conventional and molecular diagnosis of Newcastle disease during an outbreak in Punjab, Pakistan. International Livestock, Dairy & Poultry Congress, Aiwan-e-Iqbal Complex, Lahore, Pakistan, 11-12 March 2014.
 31. Kashif M, T Ahmad, A Shakoor, MY Rana, **MM Awais**, SA Muhammad, A Yousaf, M Yaqoob, Z Iqbal, A Nasir and A Khan, 2013. Comparative efficacy of enrofloxacin and oxytetracycline as systemic dry period therapy for the control of bubaline mastitis. The 10th World Buffalo Congress and the 7th Asian Buffalo Congress, Hilton Phuket Arcadia Resort and Spa, Phuket, Thailand, May 6-8, 2013.
 32. Zaman MA, Z Iqbal, MN Khan, G Muhammad, M. Younus and MM Awais, 2013. Scientific validation of ethnobotanicals used against parasites in Pakistan. International Conference and Exhibition on Traditional and Alternative Medicine held at Hyderabad, India. December 09-11, 2013.
 33. Muhammad F, **MM Awais**, M Akhtar and MI Anwar, 2013. Quantitative Structure activity relationship and risk analysis of some pesticides in cattle milk. 1st International Conference on Global Environmental Changes, GC University, Faisalabad, Pakistan, January 15-16, 2013.
 34. Akhtar M, A Hai, F Muhammad, **MM Awais** and MI Anwar, 2011 Immunostimulatory and Protective Effects of *Aloe vera* against Coccidiosis in Industrial Broiler Chickens. *Planta Medica*, 77.
 35. Akhtar M, F Muhammad, AU Haq, I Hussain, **MM Awais**, K Ashraf and MI Anwar, 2010. Effect of induced coccidiosis in three hybrid strains of industrial broiler chicken. B.S.P. Spring meeting and trypanosomiasis and Leishmaniasis Seminar, Cardiff University, Wales, UK. March 29th – April 1st, 2010.

d. PROJECT REPORTS SUBMITTED

1. Akhtar M, Muhammad F and Awais MM, 2012. Evaluation of sugar cane polysaccharides and glycoproteins as biological response modifiers and their therapeutic effect on *Eimeria* infection in chickens. Final Technical Report. Pakistan Science Foundation, Pakistan.

2. Navid MT and MM Awais, 2019. Sero- and molecular detection of Avian Influenza in backyard poultry of district Multan, Pakistan. Final Technical Report. Submitted to HEC, Govt. of Pakistan.
3. Awais MM, 2019. Evaluation of *Chenopodium quinoa* as a natural biological response modifier and its protective efficacy against coccidiosis in broilers. Final Technical Report. Submitted to Directorate of Research, BZ University, Multan

11. Research Monographs/ Lab Manuals /Booklets/Abstract Books

a. Books/Booklets	-----	03
b. Research Monographs	-----	04
c. Conference Proceeding Books	-----	04
Total (a+b+c)	-----	11

a. Books/Booklets

1. Akhtar M, MI Anwar, MR Hameed, MM Awais et al. 2017. Para-vets Training Guide. The Elite Scientific Publications, Pakistan (ISBN: 978-969-8753-14-6).
2. Shakoor A, M Kashif, A Nasir, S Ehtisham-ul-Haque, A Hussain, **MM Awais** and A Yousaf, 2014. Veterinary Medicine Practical Note Book. The Elite Scientific Publications, Pakistan. (ISBN: 978-969-7517-07-7).
3. Anwar MI, M Akhtar, **MM Awais** and Ahmad Raza, 2013. Turkey Farming. The Elite Scientific Publications, Pakistan. (ISBN: 978-969-8753-07-8).

b. Research Monographs

1. Kaleem QM, M Akhtar and **MM Awais**, 2015. *Emblica Officinalis* Derived Tannins as Native BRMs in Poultry. Lambert academic Publishing, Germany (ISBN: 978-3-659-70615-8).
2. Ahmad AA, M Akhtar and **MM Awais**, 2014. Status of Toxoplasmosis in backyard poultry of Pakistan. Lambert academic Publishing, Germany (ISBN: 978-3-659-63311-9).
3. Tariq AF, M Akhtar and **MM Awais**, 2013. Wheat bran derived Arabinoxylans: Native Immunomodulators. Lambert academic Publishing, Germany (ISBN: 978-3-659-32573-1).
4. **Awais MM** and M Akhtar, 2011. Immunostimulatory and protective effects of sugar cane in chickens. VDM Verlag Dr. Muller Aktiengesellschaft & Co KG, Saarbrücken, Germany (ISBN: 978-3-639-36178-0).

c. Conference Proceeding Books

1. Akhtar M and **MM Awais**, 2016. Abstract Book of International Livestock, Dairy and Poultry Congress -2016. The Elite Scientific Publications, Pakistan (ISBN: 978-969-8753-11-5).

2. Akhtar M and **MM Awais**, 2016. Abstract Book of 2nd International Conference on Zoonoses-2016. The Elite Scientific Publications, Pakistan (ISBN: 978-969-8753-13-9).
3. Akhtar M and **MM Awais**, 2015. Abstract Book of International Livestock, Dairy and Poultry Congress -2015. The Elite Scientific Publications, Pakistan (ISBN: 978-969-8753-10-8).
4. Akhtar M and **MM Awais**, 2014. Abstract Book of 1st International Conference on Zoonoses-2014. The Elite Scientific Publications, Pakistan (ISBN: 978-969-8753-09-2).

12. POLICY DOCUMENTS/ RECOMMENDATION NOTES

1. Drafted a policy paper to address the zoonotic issues in the country/region in consultation with experts at 1st International Conference on Zoonoses-2014 held at Bahauddin Zakariya University, Multan-Pakistan (October 16-17, 2014)
2. Drafted a policy paper for national/international policy making bodies and funding agencies to formulate the future strategies for effective control of zoonotic diseases in the country/region in consultation with experts at 2nd International Conference on Zoonoses-2016 held at Bahauddin Zakariya University, Multan-Pakistan (October 20-21, 2016)
3. Drafted Modules of DVM Internship Program (for the very first time in the country by holding 3 consecutive national workshops on developing/updating of internship modules) in consultation with stakeholders from Industry and Academia for hands on trainings of DVM internees in different organizations to meet the needs of Livestock and Poultry Sectors in the country.

13. POPULAR ARTICLES

- Awais MM**, Akhtar M, Anwar MI and Jamil H, 2011. Key Principles for healthy life in buffalo and cattle calves. Zarii Digest, 46 (2): 59,65.
- Kaleem QM, Akhtar M, **Awais MM** and Anwar MI, 2011. Parasites of Poultry, their economic losses and control. Zarii Digest, 46 (2): 64-65.
- Ullah MI, Akhtar M and **Awais MM**, 2011. Immunomodulation in animals. Zarii Digest, 46(4): 72.
- Tabassum R, **Awais MM**, Ali S and Anwar MI. Newcastle disease, an infectious disease of poultry, its signs and symptoms, treatment and control. Veterinary News and Views, 24-30 November.
- Awais MM** and Akhtar M, 2011. Dengue Fever: A global threat to mankind. Veterinary News and Views, 08-15 December.
- Hai A, Akhtar M, Haq AU and **Awais MM**, 2012. Parasites, their importance and control. Kisan Time, January, pp: 24-26.
- Rizwan HM, Akhtar M, Humayun M and **Awais MM**, 2012. Preparation of poultry shed before the arrival of chicks. Zarii Digest, 47(3): 35-36.

- Humayun M, Akhtar M, **Awais MM** and Rizwan HM, 2012. Some important diseases of calves and their control. *Zarii Digest*, 47(4): 31, 52.
- Ikrima, **Awais MM**, Abbas Y and Younus, M. 2014. Early bird mortality in chickens and its control. *Veterinary News and Views*.
- Naseer U, Akhtar M, Kaleem QM, Anwar MI, **Awais MM**, 2013. Economic losses due to parasitism in livestock industry. *Zarii Digest*, 48(1): 36-37.
- Raza A, MI Anwar, MM Awais, M Akhtar, 2016. Congo Fever and Preventive Measures. *Veterinary News and Views*
- Fayyaz A, MM awais, M Akhtar, 2016. Significance of Sheep and Goat in national Economy. *Veterinary News and Views*.
- Fayyaz A, **MM Awais**, MI Anwar and M Akhtar, 2017. Vector-Borne Diseases: A Public Health Hazard. *Agro-Veterinary News*, 24(02), 04.
- Ullah MI, MM Awais, MI Anwar and M Akhtar, 2017. A Myth - Use of Hormones in Poultry feed. *Agro-Veterinary News*
- Fayyaz A, MM Awais, MI Anwar and M Akhtar, 2018. Importance of colostrum in cattle and buffalo calves. *Agro-Veterinary News*, 24(09), 20.
- MM Awais, M Akhtar, A Fayyaz and MI Anwar, 2018. Tick borne diseases and their control. *Agro-Veterinary News*, 24(10), 19-20.
- Fayyaz A, RH Mirza, MI Anwar, **MM Awais** and M Akhtar, 2018. Care and production of sheep and goats. *Agro-Veterinary News*, 25(02), 15-16.

14. POSTGRADUATE STUDENTS SUPERVISED

M. Phil

1. Muhammad Zaka Ullah, 2017. Seroprevalence, associated risk factors and hematological impacts of Toxoplasmosis in small ruminants of district Multan, Pakistan (Completed).
2. Muhammad Asif Jaml, 2017. Comparative evaluation of the protective effects of *Lactobacillus* and *Saccharomyces* species as probiotics in *Eimeria* infection in broiler Chickens (Completed).
3. Sundas Mumtaz, 2017. Evaluation of *Ficus religiosa* for its biological response modifying and immunotherapeutic activities against avian coccidiosis (Completed).
4. Muhammad Zubair Ilyas, 2017. Studies on *Chenopodium quinoa* for its immunostimulatory and protective efficacy against coccidiosis in broilers (Completed).
5. Sonia Suleman, 2019. Prevalence of *Cryptosporidium parvum* in female population of nomadic communities of Multan-Pakistan. (Research work Completed; Thesis write up underway)
6. Rashida Nawaz, 2019. Sero-prevalence of *Toxoplasma gondii* in female population of nomadic communities of Multan-Pakistan. (Research work Completed; Thesis write up underway)

7. Sobia Ijaz, 2019. Prevalence of *Giardia lamblia* in female population of nomadic communities of Multan-Pakistan. (Research work Completed; Thesis write up underway)
8. Tahir Yaqoob, 2019. Prevalence of *Cryptosporidium parvum* in livestock population of nomadic communities in and around Multan. (Research work Completed; Thesis write up underway)
9. Hafiz Ihsan Ul Haq, 2019. Prevalence of *Giardia lamblia* in livestock population of nomadic communities in and around Multan. (Research work Completed; Thesis write up underway)
10. Mediha Rehman, 2019. Prevalence of *Toxoplasma gondii* in pet cats in Multan: A threat to female owners. (Research work Completed; Thesis write up underway)
11. Ujala Mehtab, 2019. Ameliorative effects of combined dietary supplementation of locally available bentonite clay and distillery sludge on the prevention of ochratoxicosis in broiler birds. (Research work Completed; Thesis write up underway)
12. Muhammad Ali Tahir, 2019. Evaluation of indigenous yeast derived beta-glucans for their immune enhancing and protective effects against salmonellosis in industrial broilers. (Research work Completed; Thesis write up underway)
13. Uzair Hussain, 2019. Seroprevalence of major respiratory viral pathogens in commercial broiler chicken in and around Multan-Pakistan. (Research work Completed; Thesis write up underway)

PhD

Three PhD students are currently under-supervision.