

Professor Dr. Arfan Ahmad is serving this highly esteemed institute since 2006. Currently he is working as Professor (Tenured) in University Diagnostic Laboratory (UDL), Institute of Microbiology. He holds DVM, M.Sc. (Hons.) and Ph.D. degrees in Microbiology. He conducted significant part of his Ph.D. research at Atlantic Veterinary College, UPEI Canada. He is involved in teaching, research and disease diagnosis. He has been part of national and International collaborative research projects. His area of research interest is to diagnose various infectious diseases which are prevailing in Pakistan and ultimately developing control strategies using biosafety and biosecurity measures to prevent their trans-boundary transmission. He is also serving the institute as research supervisor for undergraduate and postgraduate students and produced over 35 MPhil and 4 PhD students. He is qualified assessor for ISO/IEC 17025:2017. He is on the panel of Pakistan National Accreditation Council (PNAC), Islamabad as technical assessor to assess the quality of testing activities under the requirements of international standards in the area of Microbiology

### Publications

Name		Professor Dr. Arfan Ahmad				
Sr.	Journal	Article	Year of Publication	URL (where the publication is available on net)	Journal Category (per HEC Criteria) HJRS	Thoms
1	Acta Tropica	FMD virus spillover from domestic livestock caused outbreak in captive wild ungulates: First report from Pakistan	2022	<a href="https://pubmed.ncbi.nlm.nih.gov/35378060/">https://pubmed.ncbi.nlm.nih.gov/35378060/</a>	W	
2	Animals	Effect of Packaging Type and Aging on the Meat Quality Characteristics of Water Buffalo Bulls	2022	<a href="https://pubmed.ncbi.nlm.nih.gov/35049754/">https://pubmed.ncbi.nlm.nih.gov/35049754/</a>	W	
3	Pakistan Journal of Agricultural Sciences	Molecular Characterization and Phylogeny of Bovine Viral Diarrhea Virus isolated from Persistently infected Exotic cattle in Punjab, Pakistan	2022 (Published August) (Accepted in Feb 2022_	<a href="https://pakjas.com.pk/ba ckend/assets/storage/app/uploads/papers//Paper_Molecular9037909067.pdf">https://pakjas.com.pk/ba ckend/assets/storage/app/uploads/papers//Paper_Molecular9037909067.pdf</a>	X	
4	Food Science of Animal Resources	Effect of Carcass Electrical Stimulation and Suspension Methods on Meat Quality Characteristics of <i>Longissimus lumborum</i> of Young	2021	<a href="https://pubmed.ncbi.nlm.nih.gov/33506215/">https://pubmed.ncbi.nlm.nih.gov/33506215/</a>	W	

		Buffalo ( <i>Bubalus bubalis</i> ) Bulls				
5	Pakistan Journal of Zoology	Genotype Detection and Sero-prevalence of Bovine Leukemia Virus along with Associated Risk Factors in Exotic and Local Breeds of Cattle in and around Lahore, Punjab	2021	<a href="http://researcherslinks.com/current-issues/Genotype-Detection-and-Sero-prevalence-Punjab/20/3/3765/html">http://researcherslinks.com/current-issues/Genotype-Detection-and-Sero-prevalence-Punjab/20/3/3765/html</a>	X	
6	Indian Journal of Animal Research	Clinico-Pathological and Hemato-Biochemical Assessment of Field Originated Chicken Anemia Virus in Experimentally Challenged Broiler Chicken	2021 Accepted in 2-5-2020	<a href="file:///C:/Users/IT/Downloads/Final-attachment-published-B-1229-6089603e9087340b9bdcbbb1.pdf">file:///C:/Users/IT/Downloads/Final-attachment-published-B-1229-6089603e9087340b9bdcbbb1.pdf</a>	W	
7	Pakistan Journal of Zoology	Cytological Changes in Chicken Infectious Anemia virus infected bone marrow in broilers	2021	<a href="file:///C:/Users/IT/Downloads/1629414494PJZ_53_5_1989-1992%20(2).pdf">file:///C:/Users/IT/Downloads/1629414494PJZ_53_5_1989-1992%20(2).pdf</a>	X	
8	The Journal of Animal and Plant Sciences	Determination Of Sero-Prevalence And Associated Risk Factors Of Bovine Viral Diarrhea Virus (BVDV) In Bovine Population From Southern Punjab, Pakistan	2020 (June)	<a href="http://thejaps.org.pk/Volume/2020/30-03/04.php">thejaps.org.pk/Volume/2020/30-03/04.php</a>	W	
9	GENETIKA	Polymorphic Status And Phylogenetic Analysis Of Myostatin Gene In Pak-Thoroughbred.	2020	<a href="http://www.doiserbia.nb.rs/Article.aspx?id=0534-00122003281R#.Y0uj_1xBzIU">http://www.doiserbia.nb.rs/Article.aspx?id=0534-00122003281R#.Y0uj_1xBzIU</a>	W	
10	Pakistan Journal of Zoology	Molecular Characterization and Phylogeny of Chicken Anemia Virus Detected in Broiler	2020	<a href="http://researcherslinks.com/current-issues/Molecular-Characterization-and-Phylogeny-of-">http://researcherslinks.com/current-issues/Molecular-Characterization-and-Phylogeny-of-</a>	W	

		Poultry Flocks in Punjab, Pakistan		<a href="http://www.thejaps.org.pk/docs/V-30-01/06.pdf">Chicken/20/3/2625/html</a>		
11	The Journal of Animal and Plant Sciences	Comparison Of Analytical Sensitivity And Specificity Of Reverse Transcription Loop-Mediated Isothermal Amplification (RT-Lamp) And Reverse Transcription Polymerase Chain Reaction (RT-PCR) For Detection Of Local Pestivirus A	2020	<a href="https://www.thejaps.org.pk/docs/V-30-01/06.pdf">https://www.thejaps.org.pk/docs/V-30-01/06.pdf</a>	W	
12	The Journal of Animal and Plant Sciences	In process quality control factors affecting the quality of locally prepared <i>salmonella gallinarum</i> antigen	2018	<a href="https://www.thejaps.org.pk/docs/v-28-02/39.pdf">https://www.thejaps.org.pk/docs/v-28-02/39.pdf</a>	W	
13	The Journal of Animal and Plant Sciences	Evaluation of drinking water quality at various public places in Lahore city Pakistan.	2018	<a href="https://www.researchgate.net/publication/328118046_Evaluation_of_drinking_water_quality_at_various_public_places_in_Lahore_City_Pakistan">https://www.researchgate.net/publication/328118046_Evaluation_of_drinking_water_quality_at_various_public_places_in_Lahore_City_Pakistan</a>	W	
14	The Journal of Animal and Plant Sciences	Lipopolysaccharide gene based development and optimization of diagnostics for <i>Francisella tularensis</i>	2017	<a href="https://www.thejaps.org.pk/docs/v-27-04/15.pdf">https://www.thejaps.org.pk/docs/v-27-04/15.pdf</a>	W	
15	The Journal of Animal and Plant Sciences	Physicochemical factors affecting persistence of <i>Francisella tularensis</i> in soil"	2017	<a href="https://www.thejaps.org.pk/docs/v-27-03/44.pdf">https://www.thejaps.org.pk/docs/v-27-03/44.pdf</a>	W	
16	Pakistan Veterinary Journal	Optimization of quality control factors for indigenous <i>Mycoplasma gallisepticum</i> bacterin	2016	<a href="http://www.pvj.com.pk/pdf-files/36_2/227-229.pdf">http://www.pvj.com.pk/pdf-files/36_2/227-229.pdf</a>	W	

		preparation and their impact on immunoprophylaxis in broilers				
17	Turkish Journal of Veterinary & Animal Sciences	Comparative evaluation of factors affecting hemagglutinating activity of avian influenza (H9) virus	2016	<a href="https://dergipark.org.tr/tr/download/article-file/734788">https://dergipark.org.tr/tr/download/article-file/734788</a>	W	
18	The Journal of Animal and Plant Sciences	Comparative antibiotic resistance profile of the multidrug resistant E. coli isolated from commercial and backyard poultry	2016	<a href="https://www.thejaps.org.pk/docs/v-26-06/13.pdf">https://www.thejaps.org.pk/docs/v-26-06/13.pdf</a>	W	
19	Acta Tropica	Evidence of <i>Coxiella burnetii</i> in Punjab province, Pakistan	2016	<a href="https://www.sciencedirect.com/science/article/pii/S0001706X16302480">https://www.sciencedirect.com/science/article/pii/S0001706X16302480</a>	W	
20	Journal of General Virology.	Infectivity of wild bird-origin avian paramyxovirus serotype 1 and vaccine effectiveness in chickens	2016	<a href="https://pubmed.ncbi.nlm.nih.gov/27692048/">https://pubmed.ncbi.nlm.nih.gov/27692048/</a>	W	
21	The Journal of Animal and Plant Sciences	Characterization of <i>Mycoplasma gallisepticum</i> isolated from commercial Poultry flocks	2015	<a href="https://www.thejaps.org.pk/docs/v-25-01/16.pdf">https://www.thejaps.org.pk/docs/v-25-01/16.pdf</a>	W	
22	Frontiers in Microbiology	Prevalence and distribution of soil-borne zoonotic pathogens in Lahore district of Pakistan.	2015	<a href="https://pubmed.ncbi.nlm.nih.gov/26441860/">https://pubmed.ncbi.nlm.nih.gov/26441860/</a>	W	
23	The Journal of Animal and Plant Sciences	In Vitro Efficacy of Garlic, Glycyrrhiza and Neen Against Local Isolates of <i>Mycoplasma gallisepticum</i>	2015	<a href="https://www.thejaps.org.pk/docs/v-25-01/40.pdf">https://www.thejaps.org.pk/docs/v-25-01/40.pdf</a>	W	
24	The Journal of Animal and Plant Sciences	Characterization of <i>Mycoplasma gallisepticum</i> isolated from commercial	2015	<a href="https://www.thejaps.org.pk/docs/v-25-01/16.pdf">https://www.thejaps.org.pk/docs/v-25-01/16.pdf</a>	W	

		poultry flocks				
25	The Journal of Animal and Plant Sciences	Antibody response of broilers to locally prepared oil based <i>Mycoplasma gallisepticum</i> vaccine	2015	<a href="https://www.thejaps.org.pk/docs/v-23-4/24.pdf">https://www.thejaps.org.pk/docs/v-23-4/24.pdf</a>	W	
26	Pakistan Veterinary Journal	Hemato-Biochemical Effects of Colistin Administered Intramuscularly in Growing Broiler Birds	2014	<a href="http://www.pvj.com.pk/pdf-files/34_1/78-81.pdf">http://www.pvj.com.pk/pdf-files/34_1/78-81.pdf</a>	W	
27	Journal of Animal and Plant Sciences	Comparative diagnostic applications of antigen capture elisa and immunohistochemistry for detection of bovine viral diarrhoea persistent infection	2014	<a href="https://www.thejaps.org.pk/docs/v-24-4/08.pdf">https://www.thejaps.org.pk/docs/v-24-4/08.pdf</a>	W	
28	Virology Journal	Genetic diversity of Newcastle disease virus in Pakistan: a countrywide perspective	2013	<a href="https://virologyj.biomedcentral.com/articles/10.1186/1743-422X-10-170">https://virologyj.biomedcentral.com/articles/10.1186/1743-422X-10-170</a>	W	
29	Journal of Animal and Plant Sciences	Molecular identification of respiratory microbiota of a young ostrich ( <i>struthio camelus</i> ) using tracheo broncho alveolar lavage	2013	<a href="https://www.thejaps.org.pk/docs/v-23-5/10.pdf">https://www.thejaps.org.pk/docs/v-23-5/10.pdf</a>	W	
30	Pakistan Veterinary Journal	Zoonosis Update on H9N2 Avian Influenza Virus	2013	<a href="http://www.pvj.com.pk/pdf-files/33_3/272-276.pdf">http://www.pvj.com.pk/pdf-files/33_3/272-276.pdf</a>	W	
31	Pakistan Veterinary Journal	Serological evidence of selected abortifacients in a dairy herd with history of abortion	2013	<a href="http://www.pvj.com.pk/pdf-files/33_1/19-22.pdf">http://www.pvj.com.pk/pdf-files/33_1/19-22.pdf</a>	W	

32	Journal of Virology	Complete genome sequencing of a velogenic viscerotropic avian paramyxovirus 1 isolated from pheasants ( <i>Pucrasiamacrolopha</i> ) in Lahore, Pakistan.	2012	<a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3503072/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3503072/</a>	W	
33	Pakistan Veterinary Journal	Comparative Suitability of Ear Notch Biopsy and Serum Pairs for Detecting Nature of Bovine Viral Diarrhoea Virus Infection in Dairy Herds	2012	<a href="http://www.pvj.com.pk/pdf-files/32_3/451-455.pdf">http://www.pvj.com.pk/pdf-files/32_3/451-455.pdf</a>	W	
34	International journal of dairy technology	The influence of time elapsed after milking and lactation stage on the lactoperoxidase system of milk in Sahiwal cattle and Nili-Ravi buffaloes	2012	<a href="https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1471-0307.2012.00829.x">https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1471-0307.2012.00829.x</a>	W	
35	<u>Revue de Médecine Vétérinaire</u>	Detection, genotyping, and antigen distribution of bovine viral diarrhoea virus in archival formalin fixed paraffin embedded tissues.	2012	<a href="https://www.academia.edu/en/73755775/Detection_on_genotyping_and_antigen_distribution_of_bovine_viral_diarrhoea_virus_in_archival_formalin_fixed_paraffin_embedded_tissues">https://www.academia.edu/en/73755775/Detection_on_genotyping_and_antigen_distribution_of_bovine_viral_diarrhoea_virus_in_archival_formalin_fixed_paraffin_embedded_tissues</a>	W	
36	Pakistan Journal of Zoology	Prevalence of bovine viral diarrhoea virus persistency in 12 Holstein cattle dairy herds of Charlottetown, Canada.	2011	<a href="http://zsp.com.pk/255-261%20(6)%20PJZ-292-10.pdf">http://zsp.com.pk/255-261%20(6)%20PJZ-292-10.pdf</a>	W	
37	Pakistan Journal of Zoology	Detection of rabies virus from equines showing nervous signs	2011	<a href="https://www.researchgate.net/publication/262561574_Detection_of_Rabies_Virus_From_Equines_Showing_Nervous_Signs">https://www.researchgate.net/publication/262561574_Detection_of_Rabies_Virus_From_Equines_Showing_Nervous_Signs</a>	W	

38	Journal of Parasitology	Seroprevalence of <i>Neospora caninum</i> and <i>Brucella abortus</i> in dairy cattle herds with high abortion rates	2011	<a href="https://pubmed.ncbi.nlm.nih.gov/21506829/">https://pubmed.ncbi.nlm.nih.gov/21506829/</a>	W	
39	Turkish Journal of Veterinary and Animal Sciences	Comparative evaluation of clinical samples from naturally infected dogs for early detection of canine distemper virus.	2010	<a href="https://dergipark.org.tr/tr/download/article-file/132238">https://dergipark.org.tr/tr/download/article-file/132238</a>	W	
40	Pakistan Journal of Zoology	Comparative clinical epidemiology of toxocarosis in dogs and cats	2010	<a href="http://zsp.com.pk/pdf/129-133%20(4).pdf">http://zsp.com.pk/pdf/129-133%20(4).pdf</a>	W	
41	Pakistan Journal of Zoology	Detection of Canine Distemper Virus from Lymphopenic Dogs by RT-PCR Amplification of Nucleoprotein Gene.	2009	<a href="http://zsp.com.pk/pdf1/413-428%20(11).pdf">http://zsp.com.pk/pdf1/413-428%20(11).pdf</a>	W	
42	Pakistan Journal of Zoology	Trend in isolation and antimicrobial susceptibility of mastitis causing pathogens of Nili Ravi Buffalo.	2009	<a href="https://www.researchgate.net/publication/268074799_Trend_in_isolation_and_antimicrobial_susceptibility_of_mastitis_causing_pathogens_of_Nili_Ravi_Buffalo">https://www.researchgate.net/publication/268074799_Trend_in_isolation_and_antimicrobial_susceptibility_of_mastitis_causing_pathogens_of_Nili_Ravi_Buffalo</a>	W	
43	The Journal of Animal and Plant Sciences	Status of IgG antibodies against <i>Mycoplasma gallisepticum</i> in non-vaccinated commercial poultry breeder flocks	2008	<a href="http://thejaps.org.pk/docs/18_2-3_2008/08-803.pdf">http://thejaps.org.pk/docs/18_2-3_2008/08-803.pdf</a>	X	
44	J Vet Anim Sci.	Factors affecting hemagglutination activity of avian influenza virus subtype H5	2008	<a href="http://www.jvas.com.pk/doc/6.pdf">http://www.jvas.com.pk/doc/6.pdf</a>	-	
45	INTERNATIONAL JOURNAL OF AGRICULTURE	Immunomodulatory effect of polyimmune(Astragalus membranaceus)	2008	<a href="file:///C:/Users/IT/Downloads/Immunomodulatoryeffectofpolyimmune%20(1).pdf">file:///C:/Users/IT/Downloads/Immunomodulatoryeffectofpolyimmune%20(1).pdf</a>	-	

	& BIOLOGY	extract on humoral response of layer birds vaccinated against Newcastle disease virus.				
46	Pakistan Journal of Life and Social Sciences	Study of disease outbreak in layer flocks in and around Sarmundri area	2008	<a href="https://www.pjlss.edu.pk/pdf_files/2008_1/59-62.pdf">https://www.pjlss.edu.pk/pdf_files/2008_1/59-62.pdf</a>	-	
47	Iranian Journal of Veterinary Research	Prevalence and ecology of Lymnaea snails in Punjab	2003	Not available	-	

### **Abstracts Published:**

- Hammad ur Rehman, **Arfan Ahmad**, Masood Rabbani, Muhammad Yasin Tipu, Aamir Ghafoor. “Geographical distribution of bovine viral diarrhoea virus (BVDV) antibody in bovine serum samples collected from seventeen districts of central Punjab, Pakistan”. Proceedings of IX Asian Buffalo Congress-2018 “Climate Resilient Buffalo Production for Sustainable Livelihood”, Feb. 1-4, 2018, ICAR-Central Institute for Research on Buffaloes, Hisar, Haryana, India. p.157
- Abdul Raheem, **Arfan Ahmad**, Aamir Ghafoor, Aneela Zameer Durrani and Hammad Ur Rehman. “Determination of seroprevalence and associated risk factors of bovine viral diarrhoea virus (BVDV) in bovine population from southern Punjab, Pakistan”. Proceedings of IX Asian Buffalo Congress-2018 “Climate Resilient Buffalo Production for Sustainable Livelihood”, Feb. 1-4, 2018, ICAR-Central Institute for Research on Buffaloes, Hisar, Haryana, India. p.157.
- M.U.S. Khan, **A. Ahmad**, M. Rabbani, Muti-ur-Rehman Khan, A. Ghafoor, A.A. Ajnum, M. Avais and Hammad-ur-Rehman. Detection of bovine viral diarrhoea virus and bacterial contaminants in commercial bovine semen in Pakistan. Proceedings of IX Asian Buffalo Congress-2018 “Climate Resilient Buffalo Production for Sustainable Livelihood”, Feb. 1-4, 2018, ICAR-Central Institute for Research on Buffaloes, Hisar, Haryana, India. p.62
- Qurat ul Ain, **Arfan Ahmad**, Muhammad Nawaz, Mamoona Chaudhry, Muhammad Avais, Aqeel Javed, Hammad Ur Rehman. Study on the effects of antibiotics and vaccine administration on tissue tropism and shedding pattern of local isolate of *salmonella enterica* serovar enteritidis in commercial broiler chicken. Proceedings of OHC 2017 One Health International Conference held in UVAS Lahore, Pakistan: 13-15 Nov, 2017.
- **Arfan Ahmad**, Aamir Ghafoor, Hammad ur Rehman, Fareeha Akhtar. Retrospective study on Lab Samples for Diagnosis of Fecal and Blood Parasite of Small Ruminants in Pakistan. p. 22. Iran J Parasitol. ISSN :1735-7020, Vol. 12, Supplementary Issue, No. 1, 2017. Proceedings of PARACON 2017 International Parasitology Conference "Recent Advances and Emerging Issues in Parasitology" held in UVAS Lahore, Pakistan: 25-26 Oct, 2017.

### **Book Published:**

- Ahmad, A., M. Rabbani, K. Muhammad, (2011). Comparison of diagnostic approaches for the detection of Bovine Viral Diarrhoea persistency in dairy herds. Lambert Academic Press (LAP), Germany (ISBN-NR: 978-3-8465-2927-0).



## **Trainings, Workshops, Conferences And Symposiums:**

- One day training workshop on Immunophenotyping of poultry immune cells for vaccine research using flow cytometry held on June , 6<sup>th</sup> 2023 at UVAS LAHORE
- Attended Regional guidelines for collection and transporting priority pathogens samples in Pakistan sponsored by the US national academics of science, engineering and medicine national institute of health of Pakistan dated May 30<sup>th</sup>-June 1<sup>st</sup> 2023
- 3 days Hands–on training on food safety lab management in accordance with ISO/IEC 17025:2017 guidelines at Veterinary academy UVAS collaboration with UNIDO and JICA
- 3 days training on Antimicrobial susceptibility testing , laboratory quality management system and AMR data analysis using WHONET held on Provisional disease laboratory dated March 8<sup>th</sup>-10<sup>th</sup> 2023
- One day training workshop on Bovine Leukemia Virus : An emerging issue in dairy industry of Pakistan held on University Diagnostic laboratory UVAS Lahore dated March 9<sup>th</sup> 2023
- Attended one training on How to respond to an emergency at Veterinary academy UVAS organized by Emergency response committee uvas in collaboration with civil defense
- All Pakistan international science conference held on UVAS dated December , 14<sup>th</sup> –15<sup>th</sup> 2022
- 2 days’ workshop on Personal reliability workshop organized by Pakistan biological safety association with chrome biorisk management and the foreign international center NIH-USA dated November , 8<sup>th</sup>- 9<sup>th</sup> 2022
- Two days refresher training on biorisk management organized by Association of Biorisk Management in collaboration with Health Security Partner, USA dated Jan 13-14, 2022
- Training course on diagnosis and control of Lumpy Skin Disease held at National Veterinary Laboratory, Islamabad on March16-17, 2022
- Five Day Virtual training on Biorisk Management organized by Association of Biorisk Management by Association of Biorisk Management in collaboration with Health Security Partner, USA on Jan 18-22, 2021
- Attended 4 day Virtual Training on Safe and Secure Sample collection and Transportation by Association of Biorisk Management in collaboration with Health Security Partner, USA, Oct 28-31 2021
- Attended 3 days’ workshop on Establishing Zoonosis Control Committees for Integrated Surveillance Detection and Reporting of High Risk Pathogens in Punjab, organized by Association of Biorisk Management in collaboration with Health Security Partner, USA on Nov 25-27, 2021
- Attended 2 days congress entitled” International Buffalo congress”(IBC-2019) organized by University of Veterinary and Animal Sciences on Feb 18-19, 2019
- Attended two days’ workshop on Advanced level biosafety organized by Faculty of Veterinary Science, University of Veterinary and Animal Sciences dated Nov 26-27, 2018
- Attended 5 days Assessor Training Course on ISO/IEC 17025:2017, organized by Pakistan National Accreditation Council (PNAC), Ministry of Science & Technology, GOP, Islamabad on June 24-28, 2019
- Participated in 2 days Training Workshop on “Analytical Model Building and Proposal / Project Development” held on 28<sup>th</sup>- 29<sup>th</sup>December, 2017 Organized by Department of Statistics and Computer Science, University of Veterinary and Animal Sciences, Lahore, Pakistan.
- Participated in 1 day National Workshop on “Basics Tools in Bioinformatics” held on 29<sup>th</sup> November, 2017 Organized by Institute of Industrial Biotechnology, GC University Lahore, Pakistan.
- Participated in 2 days National Workshop on “Handling and Restraining of Migratory Birds with Tick Identification” From November, 22-23, 2017 Organized by Department of Clinical Medicine and Surgery, University of Veterinary and Animal Sciences, Lahore, Pakistan.
- Participated in 2 days National Workshop on “Role of Migratory Birds in Disease Dissemination” From November, 15-16, 2017 Organized by Department of Clinical Medicine and Surgery, University of Veterinary and Animal Sciences, Lahore, Pakistan.

- “Diagnosis of Viral Diseases” held on September 19-21,2017organized by Nuclear Institute of agriculture and biology (NIAB) Faisalabad.
- Paper titled "Recent Advances and Emerging Issues in Parasitology" presented in International Parasitology Conference PARACON 2017 held in UVAS Lahore, Pakistan: 25-26 Oct, 2017.
- Paper titled “Study on the effects of antibiotics and vaccine administration on tissue tropism and shedding pattern of local isolate of *salmonella enterica* serovarenteritidis in commercial broiler chicken” presented in One Health International Conference OHC 2017 held in UVAS Lahore, Pakistan: 13-15 Nov, 2017
- Participated as resource person in “Lab Assisted Disease Diagnostic Techniques” From December, 26 2016 to January 06, 2017 Organized by University Diagnostic Lab, University of Veterinary and Animal Sciences, Lahore, Pakistan
- “Lab Assisted Disease Diagnostic Techniques” from December, 26 2016 to January 06, 2017 organized by University Diagnostic Lab, UVAS, Lahore
- Participated as Participant in Hands on practical training on tools used for next generation sequencing based microbiome and sequencing data analysis From Dec, 14-15,2016 Organized by Quality Operations Laboratory , University of Veterinary and Animal Sciences, Lahore, Pakistan.
- Participated as Participant in International Workshop on Regional Trans-boundary, Animal Disease Workshop (ITAD). The USDA Foreign Agriculture Service and the City University of Hong KongFrom Sep, 26-30,2016 Held in Hong Kong, China
- Participated as resource person in Molecular based testing of Microbial contaminants in Bull’s Semen From June, 02-06,2016 Organized by
- University Diagnostic Lab, University of Veterinary and Animal Sciences, Lahore, Pakistan
- Participated as resource person in Lab Assisted Disease Diagnostic Techniques From June, 02-03,2016 Organized by University Diagnostic Lab, University of Veterinary and Animal Sciences, Lahore, Pakistan.
- Participated as resource person in Lab Assisted Disease Diagnostic Techniques From May 31-June 01, 2016 Organized by University Diagnostic Lab, University of Veterinary and Animal Sciences, Lahore, Pakistan.
- Participated as resource person in Molecular based testing of Microbial contaminants in Bull’s Semen From May 30-June 01 , 2016 Organized by University Diagnostic Lab, University of Veterinary and Animal Sciences, Lahore, Pakistan.
- Participated as resource person in Molecular and Microbiological Lab TechniquesFrom May 24-June 06,2016 Organized by University Diagnostic Lab, University of Veterinary and Animal Sciences, Lahore, Pakistan.
- Participated as resource person in Lab Assisted Disease Diagnostic Techniques From Dec, 7-18,2015 Organized by University Diagnostic Lab, University of Veterinary and Animal Sciences, Lahore, Pakistan
- Participated as resource person in International Workshop on Master Trainer Program for Laboratory From Sep, 7-11,2015 Organized in University of Veterinary and Animal Sciences, Lahore, Pakistan.
- Participated as resource person in One week Workshop on Basic Laboratory Techniques From Aug, 03-07,2015 Organized by University Diagnostic Lab & Department of Microbiology, University of Veterinary and Animal Sciences, Lahore, Pakistan.
- Participated in National Workshop on Controlling Biorisk in Lab as Participant on May, 11-13,2015 organized by Department of Microbiology, University of Veterinary and Animal Sciences, Lahore, Pakistan Bacteriology Department, Institute of Public Health, Lahore.
- Participated as resource person in 3 days Training Course on Diagnosis of Viral Disease From May, 04-06, 2015 Organized by Nuclear Institute for Agriculture and Biology (NIAB) Faisalabad, Pakistan.
- Participated as resource person in Three days National Workshop on Molecular Diagnostics From June, 23-25, 2015 Organized by UDL,IBBT & QOL , University of Veterinary and Animal Sciences, Lahore, Pakistan.
- Participated as resource person in One Day Workshop on Practical Aspects of Poultry Health Management Feb, 04, 2015 Organized by University Diagnostic Lab, University of Veterinary and Animal Sciences, Lahore, Pakistan.
- Participated as resource person in workshop on Laboratory Animal Handling From Jan, 28-30,2015 Organized at Postgraduate Medical Institute/ Ameer-ud-Din Medical College Lahore, Pakistan.

- Participated as resource person in National Training course on “Diagnosis of Poultry Diseases through Modern Diagnostic Techniques” organized by Department of Pathology, University of Agriculture, Faisalabad in collaboration with World Veterinary Poultry Association (WVPA-Pakistan Branch) on 03-04 April, 2014.
- Participated in National Workshop on Newcastle disease prevention and control in Pakistan as resource person on 5<sup>th</sup> Nov. 2012 organized by Institute of biochemistry and biotechnology, University of Veterinary and Animal Sciences, Lahore, Pakistan.
- Eighteen days training from Sept. 22, 2012 to Oct. 10, 2012 on advanced molecular diagnostics of Avian Mycoplasmosis at Avian Research and Connecticut Veterinary Medical Diagnostic Labs, Department of Pathobiology, University of Connecticut, USA.
- Participate as resource person in two days training workshops on Application of bioinformatics in understanding the nature of microbes. 1<sup>st</sup> to 2<sup>nd</sup> August 2012 by UDL and QOL, UVAS, Lahore
- One year research study on “Comparison of diagnostic approaches for the detection of Bovine viral diarrhoea persistency in dairy herds” at Department of Pathology and Microbiology, Atlantic Veterinary College, University of Prince Edward Island, Canada. January 2009 to December 2009.
- One day training session on “Internal auditing of ISO 17025; 2005” by QMS 9000, held at U.V.A.S, Lahore on 12 Dec, 2006.
- One week workshop on “Practical Veterinary epidemiology” by Institute of Continuing Education and Extension, UVAS, Lahore on November 4 – 11, 2006
- 6<sup>th</sup> annual National training course on Modern Techniques in Biotechnology, 5-9 May, 2008 at National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad.
- Teacher Orientation Program for 15 days held at University of Veterinary and Animal sciences Lahore from March 12, 2007 to March 28, 2007.
- Six days training workshop on “Laboratory diagnosis of important diseases.” held at National Veterinary Laboratories Islamabad.
- 6 days Workshop on “Cultivation and maintenance of BHK-21 Cell line” by Institute of Continuing Education and Extension, UVAS, Lahore from May 16, 2005 to May 21, 2005

### **Training Courses (Participation):**

- Organizer of One day training workshop on Bovine Leukemia Virus : An emerging issue in dairy industry of Pakistan held on University Diagnostic laboratory UVAS Lahore dated March 9<sup>th</sup> 2023
- Organizer of Training on NEW ISO-17025:2017 Standard organized by University Diagnostic Lab, UVAS, Lahore on August 18, 2020
- Facilitator in Poultry Science conference at International Poultry congress organized by Pakistan Poultry Association and University of Veterinary & Animal Sciences, Lahore dated September, 27-29, 2018
- Participated in 5 days Assessor Training Course on “ISO 17025:2017” held on January 15-19, 2018 Organized by Pakistan National Accreditation Council (PNAC), Ministry of Science and Technology, Islamabad.
- Participated in 3 days Training Course on “Diagnosis of Viral Disease” held on September, 19-21, 2017 Organized by Nuclear Institute for Agriculture and Biology (NIAB) Faisalabad, Pakistan.

### **Conferences (Oral Presentation):**

- Secretary of Three days training course on diagnostic and surveillance technique organized by Veterinary Academy on January 5-7, 2022
- Laboratory Biosafety, Equipment and Waste Disposal for Lab Assistants of L & DD, Punjab (Secretary

- Organizing committee) organized at Institute of Microbiology, UVAS, Lahore on 13-15 Oct, 2020
- Facilitator as secretary of Abstract review and poster presentation committee Poultry Science conference at International Poultry Expo Organized by Pakistan Poultry Association and University of Veterinary & Animal Sciences, Lahore dated September, 13-15, 2019
- Facilitator as secretary of Abstract review and poster presentation committee in Poultry Science conference at International Poultry congress Organized by Pakistan Poultry Association and University of Veterinary & Animal Sciences, Lahore on Sep. 27-28, 2018
- Participated in 3 days One Health International Conference (OHC 2017) From November, 13-15, 2017 Organized by College of Veterinary and Animal Science, Jhang - Pakistan (Sub Campus) UVAS, Lahore.
- Participated in 2 days International Parasitology Conference on Recent Advances and Emerging Issues in Parasitology From October, 25-26, 2017 Organized by Department of Parasitology, University of Veterinary and Animal Sciences, Lahore, Pakistan.

## Projects

Sr. No.	Title	Funding Source	Status	Amount (Million Rs)
1.	In depth genetic diversity and molecular epidemiology of newly emerging Bovine Leukemia virus (BLV) in dairy animals of Punjab and development of strategies to control disease in Pakistani herds	Higher Education Commission of Pakistan	On going (PI)	4.0 Million PKR
2.	Molecular Characterization of Bovine Pestivirus isolates from dairy animal of Pakistan and their use in diagnostic, biosecurity and biological development to control disease in Pakistan herds	Higher Education Commission of Pakistan	Completed in 2020 (PI)	6.022 M PKR

3.	Molecular approach to use avian cytokines for the control of indigenous avian influenza (H9N2) in commercial Poultry	Higher Education Commission of Pakistan	On-going CO-PI	5.28 M PKR
4.	In depth genetic diversity and molecular epidemiology of newly emerging Bovine Leukemia virus (BLV) in dairy animals of Punjab and development of strategies to control disease in Pakistani Herds	Higher Education Commission of Pakistan	On going (PI)	3.9 M PKR
5.	HEC funded project Mapping an in-depth genetic diversity of infectious Bronchitis virus (IBV) in Pakistan and development of serotype-matched recombinant IBV vaccine	Higher Education Commission of Pakistan	On going (CO-PI)	6.64 M PKR

### Area of Interest

- Molecular Characterization of bovine Pesti viruses, New Castle disease, and Avian influenza viruses, Salmonellosis, avian mycoplasmosis etc
- Food safety
- Antimicrobial Resistance