

JAVED MUHAMMAD

Ph.D. Microbiology, HEC Approved Supervisor
Assistant Professor, Department of Microbiology, University of Haripur
ISO/IEC 17025:2017 LA, PBSA KP CH/Treasurer, IFBA CP, WHO CS, ASM 52W
Biosafety, Biosafety Expert KP Health Dept.

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University of veterinary and Animal Sciences, Lahore, Pakistan (2012-2016)
University of veterinary and Animal Sciences, Lahore, Pakistan (2010-2012)
Hazara University Mansehra, khyber Pakhtunkhwa, Pakistan (2005-2009)

Ph.D. Microbiology
M.Phil. Microbiology
BS (Honor) Microbiology

Ph.D Thesis Title: Molecular and serological characterization of soil borne *Francisella tularensis*

Research Interest: Microbiology, Molecular Biology, Disease Surveillance, Biosafety and Biosecurity

Experience:

- **Department of Microbiology, University of Haripur** (29th July, 2020 to Date): Working as an Assistant Professor
- **Department of Microbiology, University of Swabi** (31st may, 2018 to 28th July, 2020): Served as an Assistant Professor
- **Department of Health, KP** (7th April-10th August, 2020): Served as a Biosafety Expert
- **Pakistan Biological Safety Association, Islamabad** (7th February, 2020 to Present): Serving as Treasurer at Pakistan Biological Safety Association, Islamabad.
- **Pakistan Biological Safety Association, Islamabad** (25th July, 2018 to 25th January, 2020): Served as Chapter Head, Khyber pakhtunkhwa at Pakistan Biological Safety Association, Islamabad.
- **Pakistan Biological Safety Association, Islamabad** (April 1, 2016 to 30th, May, 2018): Worked as Program Coordinator at Pakistan Biological Safety Association, Islamabad.
- **The Pennsylvania State University, USA** (Feb, 2015 to Aug 10, 2015): Worked Visiting Scholar on virulence factors (hypothetical protein) of *Francisella tularensis* and its role both in vitro and in vivo funded by HEC, Pakistan.
- **Nuclear Institute for Food and Agriculture, Tarnab, Peshawar**. (15th May-30th August, 2009): Successfully completed three months internship on “effect of Rhizabium inoculation on growth and Nodulation of Sesbania”.
- **Pathology Department of Ayub Teaching Hospital, Abbottabad**. (26th Dec, 07 -26th Jan, 08): Successfully completed one month internship in Blood bank, Bacteriology lab.

Awards/Honors:

- Selected as a Pakistan Biological Safety Association, **Treasurer** from 25th January, 2020 to Present.
- Nominated as Pakistan Biological Safety Association, Khyber Pakhtunkhwa **Chapter Head** from 25th July, 2018 to Present.

- Successfully completed a training on entitled “ Use of Polymerase Chain Reaction” organized by The National Academies of Sciences, USA and Washington State University, USA at Kenya Medical Research Institute, **Kenya** from 28th October-4th November, 2019.
- Participated in a program entitled “Improving Biosecurity in Pakistan: Community of Interest” organized by ANSER, USA at Bangkok, **Thailand** from October 8-9, 2019.
- Participated as an invited speaker on title “Role of an Association in Development of National BioRisk Management capabilities- Case study of Pakistan” in CBRN project 46 Final Conference organized by Fundacion Internacional y para Lberoamerica de Administracion y Politicas Publicas (FIIAPP) at Crown Plaza Hotel, **Vientiane, Lao PDR** from July 2-5th, 2018.
- Participated in a workshop entitled “Responsible Conduct in the Life Sciences” organized by Pakistan Biological Safety Association, Fogarty International Center, National Institutes of Health (US) at Pullmen Hotel, **Dubai** from June 20-24th, 2018.
- Participated as an International Expert in “BioRisk Management Workshop” organized by TSY Consultancy, Malaysia from December 4-10th, 2017 at **Bangkok, Thailand** funded by CRDF, USA.
- Participated as an International Expert in National Laboratory Experts Workshops Phase 2 “BioRisk Management” funded by European Union at Hotel Kimberly, Manila, **Philippine** from 25-27th October, 2017.
- Certificate of Achievement and shield of honor in recognition of rendering outstanding services, time and commitment for accomplishment of “**BioPrism manual and Biosafety training program**” by Pakistan Biological Safety Association, Fogarty International Center, National Institutes of Health (US) and Behavioral-Based Improvement Solutions (US) at Islamabad on July 30, 2017.
- Travel grant award (3,665 \$ US) from Health Security Partners (HSP), USA to attend 20th European Biosafety Association Annual meeting at Madrid **Spain** from 24-29th April, 2017.
- Participated as an International Expert in National Laboratory Experts Workshops Phase 1 “Biosafety and Biosecurity Training for sustainable BioRisk Management” funded by European Union at **Pasteur Institute of Loa PDR** from 6-10th February, 2017.
- International Course of Infectious diseases pathogenesis in Asia/Pacific at the Institute Pasteur of shanghai 4-20th May, 2017 fully funded by Institute Pasteur of shanghai, **China**.
- Selected for ASM 52 weeks Biosafety program for year 2017.
- International Research support Scholarship (IRSIP) at **Pennsylvania State University, USA** funded by Higher Education Pakistan. (Feb 15- Aug 10, 2015)
- Travel Grant (500 Pound) for International Conference on Tularemia in Croatia funded by University of Rijeka, **Croatia**. (28 Sep-2nd October, 2015)
- PhD fellowship for 5000 scholarship – Phase II’ Batch-II awarded by Higher Education Commission, Islamabad on April 09, 2014.
- Merit Scholarship funded by University of Veterinary and Animal Sciences, Lahore. (2011-2012)
- 3rd position in workshop on “**innovative projects**” organized by National Academy of Young Scientist and Pakistan Science Foundation on August 11-12, 2012 at Institute of Chemical Engineering and Technology, Punjab University.

International Training:

- ISO/IEC 17025:2017 Laboratory Quality Management System (LQMS) Lead Assessor Certified by Chartered Quqlaity Insitute (CQI) and International Register of Certified Auditors (IRCA) on dated 13-17th May, 2019.
- International Federation Biosafety Association certified for “**Professional Biowaste Management**” on January 30, 2018
- International Federation Biosafety Association certified for “**Professional BioRisk Management**” on January 13, 2018.
- Successful completion of **American Society for Microbiology** “52 Weeek of Biosafety” course from January-December, 2017.
- **World Health organization (WHO) certified Shipper** for Infectious Substances Shipment from 19th October, 2017-19th October, 2019.
- Certificates of successfully completion to Frontline Foundation, **USA** courses on “**Biorisk Management, Dual Use Research of Concern, Use of Biosafety cabinet and Waste Management**” internationally accredited with 1.5 CEUs (15 credit hours) from 19-21st August, 2017.
- Certificate of attendance to the Institute Pasteur International network Asia-Pacific Teaching Course “**Pathogenesis of Infectious Disease**” at the Institute Pasteur of Shanghai, **China** on 4-18th May, 2017.
- Certificate of attendance to “**Tool and tips for practical biosafety training: CWA: 16335:2011 Biosafety professional Competence**” at Madrid, **Spain** on 26th April, 2017.

Projects:

- **Co-PI:** Project entitled “Spatial Seroprevalence and comparative analysis of Human and Animal brucellosis in Khyber Pakhtunkhwa” submitted to HEC, Islamabad under NRPU Program.
- **PI:** Project entitled “Comparison of Sero-prevalence of Brucella between Butchers and Community in District Swabi, KPK, Pakistan” 2018.Funded by Higher Education Commission, Islamabad (**470000 Rs.**)
- **PI:** Project entitled ” Characterizing Mycobacterium bovis to see its potentials in causing zoonotic tuberculosis in Pakistan and increasing global burden of antimicrobial resistance” 2018 submitted to British Society for Antimicrobial Chemotherapy (**36502 £**)
- **Team Member:** Project entitled as “**Enhancing Biorisk Management in Pakistan**” funded by Fogarty International Center (FIC), National Institutes of Health (NIH), USA in collaboration with Pakistan Biological Safety Association.
- **Team Member:** Project entitled “**Implementation of Sustainable High Reliability Organization (HRO) Management, International Standards Organization (ISO) ISO35001 (converted from CWA15793), and Institutional Biosafety Committees**” funded by Fogarty International Center (FIC), National Institutes of Health (NIH), USA in collaboration with Pakistan Biological Safety Association.
- **Expert Team Member:** Project entitled “**Enhancement of CBRN capacities of South East Asia in addressing CBRN risk mitigation concerning CBRN first response, biosafety and biosecurity, awareness raising and legal framework**” European Union Chemical, Biological, Radiological and Nuclear Risk Mitigation Centres of Excellence Initiative or EU CBRN CoE Project 46: (**3000 000.0 €**).
- **Team Member:** Project titled as “**Spatial Ecology and Epidemiology of Soil borne Human and Animal Bacterial Pathogens and its Public Health Significance in Pakistan**” funded by Defense Threat Reduction

Agency, USA, to Pennsylvania State University and sub awarded to University of Veterinary and Animal Sciences, Lahore (**360,000\$**; October 1, 2014- February 28, 2016).

Paper Published:

- Muhammad Zubair Shabbir, Tayyebah Sohail, Aziz Ul-Rahman, Tariq Abbas, Qasim Ali, Zia Ur Rehman, lahtasham Khan, Tahir Yaqub, **Javed Muhammad**, et al., (2020). Sentinel surveillance of selected veterinary and public health pathogens in camel population originating from Southern Punjab province, Pakistan. *Acta Tropica*. 205: 105435. **(2.6)**
- Ali Akbar, Muhammad Bilal Sadiq, Imran Ali, Muhammad Anwar , Niaz Muhammad , **Javed Muhammad**, Muhammad Shafee , Sami Ullah, Zareen Gul , Said 6 Qasim, Shaikh Ahmad and Anil Kumar Anal. 2019. *Lactococcus lactis* subsp. *lactis* isolated from Fermented Milk Products and Its Antimicrobial Potential. *CYTA Journal of Food*. **(1.625)**.
- **Javed Muhammad** , Masood Rabbani, Muhammad Zubair Shabbir, Khushi Muhammad, Muhammad Tasleem Ghori, Haroon Rasheed Chaudhry, Zia Ul Hassnain, Tariq Jamil, Tariq Abbas, Muhammad Hamid Chaudhry, Muhammad Haisem, Muhammad Asad Ali, Muhammad Nisar, Girish S. Kirimanjeswara and Bhushan M. Jayarao. 2019. *Frontiers in Cellular and Infection Microbiology*. doi: 10.3389/fcimb.2019.00089. **(3.518)**
- Rais Ahmed, Muhammad Khalid Manzoor, Iftikhar Hussain, Muhammad Saqib, Haleema Sadia, **Javed Muhammad**, Amjad Islam Aqib, Asma Irshad, Abdul Wahab Manzoor, Kashif Prince, Muhammad Zain Saleem. 2019. Abattoir based sero survey of *Mycobacterium avium* subspecies paratuberculosis in bovines in district Faisalabad, Pakistan. *Pakistan Journl of Zoology*. ID: MH20190313060302-R2. **(0.547)**
- Ali Akbar, Muhammad Bilal Sadiq, Imran Ali, Niaz Muhammad, Ziaur Rehman, Muhammad Najam Khan, **Javed Muhammad**, Shabir Ahmad Khan, Fazal Ur Rehman, Anil Kumar Anal. 2019. Synthesis and antimicrobial activity of zinc oxide nanoparticles against foodborne pathogens *Salmonella typhimurium* and *Staphylococcus aureus*. Volume 17, p: 36-42. doi.org/10.1016/j.bcab.2018.11.005
- M. T. Ghori, M. S. Khan, J. A. Khan, M. Rabbani, M. H. Chaudhary, M. Z. Shabbir, R. Ahmed, H. R. Chaudhry and J. Muhammad. 2018. Molecular detection of *Burkholderia mallei* in nasal swabs from draught horses with signs of respiratory tract infection. *The Journal of Animal & Plant Sciences*,. 28(6)1717-1724. **(0.529)**
- Iqra Safdar, Ali Ahmad Sheikh, Fareeha Akhtar, **Javed Muhammad**, Tanveer, Hussain, Mawra Gohar, Amna Kanwal and Ayesha Tabassum. 2018. Optimization of multiplex PCR for detection of gram positive foodborne pathogens from retail quail meat. *Pakistan Journal of Agriculture Sciences*. 55(4), 953-956. **(0.618)**
- M. Jibreel, A. Ahmad, M. Rabbani, H. Mushtaq, A. Ghafoor, M. Z. Shabbir, M. H. Saleem, M. K. Saleemi, M. Avais, **J. Muhammad** and H. Rehman. 2018. Evaluation of drinking water quality at various public places in Lahore city Pakistan. *The Journal of Animal & Plant Sciences*, 28(5): 1314-1320. **(0.529)**
- Haroon Rashid, Khushi Muhammad, Masood Rabbani, Muhammad Sarwar Khan, Tasleem Ghori, Mamoona Chaudhry, Hamad Bin Rashid, Muhammad Zubair Shabbir, Muhammad Hamid Chaudhary, Muhammad Asad Ali, Mian Muhammad Khubaib Sattar, **Javed Muhammad** and Bhushan Jayarao. 2018. Prevalence and Distribution of Soil-Borne *Bacillus anthracis* in Different Districts of Punjab, Pakistan. *Pakistan J. Zool.*, 50(6): 1-4. **0.790**.
- Zahra Malik, Arfan Ahmad, Aftab Ahmad Anjum, Asim Aslam, Muhammad Zubair Shabbir, Aamir Ghafoor, Javed Muhammad, Muhammad Avais, N Ahmad, MH Saleem, Masood Rabbani. 2018. In

process quality control factors affecting the quality of locally prepared *Salmonella gallinarum*. Journal of Animal and Plant Sciences. 28(2): 656-659 **(0.529)**

- Irfan Khattak, Muhammad Hassan Mushtaq, Sultan Ayaz, Sajid Ali, Anwar Sheed, **Javed Muhammad**, Muhammad Luqman Sohail, Haq Amanullah, Irshad Ahmad, and Sadeeq ur Rahman. 2018. Incidence and Drug Resistance of Zoonotic Mycobacterium bovis Infection in Peshawar, Pakistan. Advances in Microbiology, Infectious Diseases and Public Health. DOI: 10.1007/5584_2018_170. **(1.881)**
- Asfa Rasool, Aftab Ahmad Anjum, Masood Rabbani, Muhammad Lateef, Fariha Akhter, Hina Afroz, **Javed Muhammad** and Muhammad Nawaz. 2018. Molecular characterization and phylogenetic analysis of Mycoplasma synoviae isolated from chicken. The Journal of Animal and Plant Sciences. 28(2): 491-497. **(0.529)**
- Rais Ahmed, Khushi Muhammad, Masood Rabbani, Aftab Ahmad Anjum and **Javed Muhammad**. 2017. Risk factors associated with the prevalence of soil borne Brucella species detected by metagenomics approach in Punjab, Pakistan. Journal of Animal and Plant Sciences. 27(6). **(0.529)**
- Muhammad Taslim Ghori, Muhammad Sarwar Khan, Jawaria Ali Khan, Masood Rabbani, Muhammad Zubair Shabbir, Haroon Rashid Chaudhry, Muhammad Asad Ali, **Javed Muhammad**, Mandy Carolina Elschner, Bhushan M. Jayarao. 2017. Seroprevalence and risk factors of glanders in working equines – Findings of a cross-sectional study in Punjab province of Pakistan. Acta Tropica 176 (2017) 134–139. **(2.629)**
- **Javed Muhammad**, Masood Rabbani, Khushi Muhammad, Muhammad Wasim, kalyan dewan, Aftab Ahmad Anjum, Ali Ahmad Shiekh, Arfan Ahmad, Fariha Akhtar, Muhammad Nisar, Bhushan M Jaryo and Girish Kirimanjeswara. 2017. Lipopolysacharride gene based development and optimization of diagnostics for *Francisella tularensis*. Journal of Animal and Plant Sciences. 27(4): 1161-1166. **(0.529)**
- **Javed Muhammad**, Masood Rabbani, Khushi Muhammad, Muhammad Wasim, Arfan Ahmad, Ali Ahmad Shiekh, Fareeha Akhtar, Asfa Rasool, Irfan Khattak, Tasmia Bashir, Zia Ul Islam, Majeeda Rasheed. 2017. Physicochemical factors affecting persistence of *Francisella tularensis* in soil. Journal of Animal and Plant Sciences. 27(3): 1047-1050. **(0.529)**
- Muhammad Nisar, Mansur ud Din Ahmad, Muhammad Hassan Mushtaq, Wasim Shehzad, Abid Hussain, **Javed Muhammad**, Kakambi V. Nagaraja, Sagar M. Goyal. 2017. Prevalence and antimicrobial resistance patterns of Campylobacter spp. isolated from retail meat in Lahore, Pakistan. Journal of Food control. 80: 327–332. **(4.248)**
- Muhammad Asad Ali, Khushi Muhammad, Aftab Ahmad Anjum, Mansur-ud-Din Ahmad, Masood Rabbani, Muhammad Zubair Shabbir, Arfan Ahmad, Muhammad Nawaz, Muhammad Tasleem Ghori, Javed Muhammad3, Haroon Rashid Chaudhry, Tariq Jamie, Muhammad Haisem, Tasmia Awan, Rais Ahmad, Bhushan M Jayarao. 2017. Association of soil chemistry and other factors with spatially distributed Burkholderia mallei DNA in Punjab province, Pakistan. IEEE. DOI: 10.1109/IBCAST.2017.7868058.
- Riaz ud Din, Sarzamin Khan, Naila Imtiaz, Saima Aslam, Shakoor Ahmad, Hamayun Khan, Masood Rabbani, **Javed Muhammad**, Zafar Iqbal Tanveer and Sakhawat Ali. 2017. Study on quality and efficacy of commercial tylosin and doxycycline products against local isolates of mycoplasma in broilers. Pakistan Journal of Pharmaceutical Sciences. 30(2): 541-549. **(0.596)**
- Fareeha Akhtar, Masood Rabbani, Khush I Muhammad, Rana Muhammad Younas, Ali Ahmad Sheikh, Aamir Ghafoor, Arfan Ahmad, **Javed Muhammad**, Asfa Rasool and Arfat Yousaf Shaheen. 2016. Comparative antibiotic resistance profile of the multidrug resistant *E.coli* isolated from commercial and backyard poultry. Journal of Animal and Plant Sciences. 26(5). **(0.529)**

- Fareeha Akhtar, Masood Rabbani, Khush I Muhammad, Rana Muhammad Younas, Ali Ahmad Sheikh, Raheela Akhtar, **Javed Muhammad**, Asfa Rasool. 2016 Phylogenetic grouping of the pathogenic E.coli isolated from commercial broiler chicken in Pakistan. Journal of Animal and Plant Sciences. 26(5):1242-1246. **(0.529)**
- Muhammad Zubair Shabbir, Sidra Akrama, Zia ul Hassan, Kashif Hanif, Masood Rabbani, **Javed Muhammad**, Muhammad Hamid Chaudhary, Tariq Abbas, Muhammad Taslim Ghori, Haroon Rashid, Tariq Jamil, Zia-ul-Islam, Haisem Rasool, Asghari Banu, Arfan Ahmad, Muhammad Asad Ali, Tahir Yaqub, Walt McVey, Bhushan M. Jayarao. 2016. Evidence of Coxiella burnetii in Punjab province, Pakistan. Acta Trop. 163:61-69 doi: 10.1016/j.actatropica.2016.07.017. **(2.629)**
- Asfa RASOOL, Sameera AKHTAR, Khushi MUHAMMAD, Masood RABBANI, Aftab Ahmed ANJUM, **Javed MUHAMMAD**, Arfan AHMAD, Ali Ahmad SHEIKH, Fakhra LIAQAT, Fariha AKHTAR, Rabia TAHIR. 2016. Comparative evaluation of factors affecting hemagglutinating activity of avian influenza (H9) virus. Turkish Journal of Veterinary and Animal Sciences. 40: 102-106. **(0.513)**
- Amna Kanwal, Ali Ahmad Sheikh, Masood Rabbani, Tanveer Hussain, Iqra Safdar, Ayesha Tabassum, Asfa Rasool, **Javed Muhammad** and Mawra Gohar. 2015. Detection of *Escherichia coli* & Salmonella from retail quail meat through optimized multiplex PCR. Pak. J. Agri. Sci., Vol. 52(3). 809-813. **(0.618)**
- Mawra Gohar, Ali Ahmad Sheikh, Tanveer Hussain, **Javed Muhammad**, Ayesha Tabassum, Amna Kanwal and Iqra safdar. 2015. Plasmid profiling and curing of multidrug resistant *Escherichia coli* recovered from retail chicken meat. The Journal of Animal & Plant Sciences, 25(4): 984-988. **(0.529)**
- Arfat Yousaf, Ali Ahmad Sheikh, Masood Rabbani, Asim aslam, Tasra Bibi, Fakhra Liaqat, **Javed Muhammad**, and Shafqat Ftima Rehmani. 2015. Antibacterial activity of herbal extracts against multidrug resistant *Escherichia coli* recovered from retail chicken meat. Pakistan Journal of Pharmaceutical Sciences. 28(4):1295-1300. **(0.596)**
- Fakhra Liaqat, Ali Ahmad Sheikh, Jawad Nazir, Tanveer Hussain, Masood Rabbani, Arfat Yousaf Shaheen and **Javed Muhammad**. 2015. Studies on the efficacy of antibacterial potential bearing plants against clinical isolates of vancomycin resistant *Staphylococcus aureus*. PJP. 28(3): 997-1004. **(0.596)**
- **Javed Muhammad**, Aftab Ahmad Anjum, Masood Rabbani, Khushi Muhammad, Muhammad Wasim, Arfan Ahmad, Ali Ahmad Sheikh, Rana Khurram Khalid, Arfat Yousaf Shaheen, and Fakhra Liaqat. 2015. In vitro efficacy of garlic, glycyrrhiza and neem against local isolates of *Mycoplasma gallisepticum*. The Journal of Animal & Plant Sciences, 25(1): 2015, Page: 295-297. **(0.529)**
- Ahmad, M. Rabbani, K. Muhammad, M. Younus, M. Z. Shabbir, A. Ghafoor, A. A. Anjum, J. Nazir, M. K. Saleemi, **J. Muhammad**, A. A. Ali and A. Cepica. 2014. Comparative diagnostic applications of antigen capture elisa and immunohistochemistry for detection of Bovine Viral Diarrhea Persistent infection. J. Anim. Plant Sci. 24(4). **(0.529)**
- Manzoor M.M, M.Z. Alam , Z.I. Chauhan , S.A.H. Gilani , S.T.H. Shah , A. Ali and **J. Muhammad**. 2014. Gradient Replacement of Fish Meal with Poultry By-Products Meal in Broiler Rations Supplemented by Amino Acid. Pakistan Journal of Nutrition 13 (4): 234-238.
- Ali. A. A.R Abid, Z.I. Chauhan, G. Ahmad, S. Muhammad and **J. Muhammad**. 2014. Effect of Different Levels of Biofeed (EM4) on the Performance of Broiler Chicks. Pakistan Journal of Nutrition 13 (4): 219-222.

- Qurat ul ain Hanif, **Javed Muhammad**, Tanveer Hussain, Ali Ahmad Sheikh, Obaid Ullah Qazi, Sidra Akram, Khadija Abid and Saima Yaqub. 2014. Evaluation of Conventional and Molecular Techniques in Diagnosis of Clinical Samples of *Mycobacterium tuberculosis*. World Applied Sciences Journal 30 (6): 762-764, 2014.
- Umar Bacha, Muhammad Nasir, Naveed Akbar, Yasir Allah Ditta, Muhammad Asif Ali, **Javed Muhammad**, Abdul Wajid, Muhammad Aamir Iqbal, Asad Amjad, Ihsanullah Kakar, . 2013. Procedure Development for Identification of Histamine from Chicken Meat. Protocol exchange, Nature protocol.2947.
- Nasir Ali, Sajid Naem, Suliman Qadir Afridi, Javed Muhammad, Umar Bacha. 2013. Molecular study of Apolipoprotein E gene in familial hypercholesterolemia families. INTERNATIONAL JOURNAL “Advancements in Life Sciences”. 1(1).
- Abdul Wajid, Muhammad Wasim, Tahir Yaqub, Shafqat F Rehmani, Tasra Bibi, Nadia Mukhtar, **Javed Muhammad**, Umar Bacha, Suliman Qadir Afridi, Muhammad Nauman Zahid, Zia u ddin, Muhammad Zubair Shabbir, Kamran Abbas and Munir Ahmed. Detection/pathotyping of Newcastle disease virus isolates in clinical samples using real-time polymerase chain reaction assay. www.nature.com/ protocolexchange/protocols/2963
- **Javed Muhammad**, Umar Bacha, Aftab Ahmad Anjum, Ali Ahmad Sheikh, Arfan Ahmad, Firasat Hussain, Mian Muhammad Salman. 2013. Assessment Of Different Preservative Methods For Microbial Quality And Shelf Life Of Chicken Meat. Journal of Infection and Molecular Biology. 1 (3).
- Abdul Majid, Nadia Jabeen, Muhammad Junaid, **Javed Muhammad**, Junaid Ali Shah, Muhammad Amjad Ali, Zakir Ullah, Imran Zamin, Ali Ahamd Sheikh. 2013. Nodular Vasculitis caused by *Chlamydomphila pneumonia*. Journal of Infection and Molecular Biology. 1 (3): 49 – 51.
- Umar Bacha, Muhammad Nisar, Muhammad asif Ali, **Javed Muhammad** and Ali Ahmad Sheikh. 2013. Nucleotides supplementation improves various function of the body. J. Anim. Health. Produ. 1(1):1-5.
- Abdul Majid, **Javed Muhammad**, Kosar Tamana, Muhammad Nasir Riaz, Muhammad Naveed, Tahir Ali Khan, Aamir Ghafoor, Ali Ahmad Sheikh, Muhammad Nauman Zahid. 2013. Real time PCR based detection of hepatitis B infection in suspected liver disease patients of district Mardan, KPK. Int. J. Adv. Res. 1(7): 145-148.
- Umar Bacha , Muhammad Nasir , Muhammad Asif Ali ,Naveed Akbar , Aftab Ahmad Anjum , **Javed Muhammad**, Tanveer Hussain, Abdul Wajid, Tayyab Shahzad, Anjum Rashid. 2013. L-carnitine of red meat consumption contributes less in heart diseases progression as compared to low expressed PPAR α leading to activation of mTORIC. Int. J. Adv. Res. 1(7): 169-174.
- Umar Bacha¹, Muhammad Nasir, Muhammad Hassan Mushtaq, Tayyab Shahzad, Muhammad Asif Ali, **Javed Muhammad**, Naveed Akbar. 2013. Role of Paleolithic Diet in Prevention of Diabetes and Related Chronic Diseases Consequences. Advances in Pharmaceutical and Ethnomedicines 1 (1): 1 – 3.

Paper Submitted:

- **Javed Muhammad**, Masood Rabbani, Khushi Muhammad, Arfan Ahmad, Ali Ahmad Sheikh, Mushtaq Ahmad Gondal, Rana Khurram Khalid, Asim Raza, Asfa Rasool, Fariha Akhtar, Girish S Kirimanjeswara, Mazhar Iqbal Khan. 2015. Isolation and phylogenetic analysis of *Mycoplasma gallisepticum* from Pakistan. Pakistan Journal of Agriculture Sciences.
- Mian Muhammad Salman, Aftab Ahmad Anjum, Tahir Yaqub, Mansur-ud-Din Ahmad, **Javed Muhammad**, Muhammad Asad Ali, Muhammad Nawaz. 2016. Efficacy of commercial disinfectants against the water contaminating bacteria at commercial broiler farms. Journal of Animal and Plant Sciences.

- Fayyaz Yasin, Ali Ahmad Sheikh, Masood Rabbani, Asim Aslam, Muhammad Imran Rasheed, **Javed Muhammad** and Rabia Tanvir. 2016 Study the resistance pattern to quinolones and other antimicrobials by multidrug resistant *Escherichia coli* isolated from retail chicken meat in Lahore, Pakistan. *British Poultry Science*.

Paper in Prep:

- **Muhammad J**, Avanzato V, Dewan KK, and Kirimanjeswara GS. Flip B homolog contributes to intramacrophage survival of *Francisella tularensis*. *Journal of bacteriology*.
- Place DE, Yuzefpolskiy Y, katkere B, **Muhammad J**, Dewan KK, Williamson D, Kalia V, and Kirimanjeswara G. Comparative Analysis of intradermal and intranasal *Francisella tularensis* Live vaccine Strain vaccination. *European journal of immunology*.
- Dewan KK, Williamson D, Markley R, Place DE, Katkere B, **Muhammad J**, and Kirimanjeswara GS. Unique genetic rearrangement of PuRA, HGPRT, and purH in purine biosynthetic pathway of *Francisella tularensis* and their role in virulence. *Journal of infection and immunity*.
- Markley R, Katkere B, Dewan KK, Place DE, Williamson D, Shay AE, **Muhammad J**, Goralsi T, Alvarado SY, Prabhu SK, Kirimanjeswara GS. *Journal of Biological Chemistry*.

Significant Publications:

- Sean Kaufman, Saima Saleem, Samreen sarwar, **Javed Muhammad**, Aamer Ikram and Furqan Ahmed. 2018. *BioPrism: A laboratory Safety Training Manual* published by Pakistan Biological safety Association.
- Khushi Muhammad, Masood Rabbani, Haroon Rashid, Muhammad Asad, **Javed Muhammad**. 2014. *Khushis Veterinary Vaccinology Jots: Undergraduate Short Notes*. CreateSpace Independent Publishing Platform, UK.
- Khushi Muhammad, Masood Rabbani et al., **Javed Muhammad**. 2014. *Onehealth: Open source bacteriology*. CreateSpace Independent Publishing Platform, UK.
- **Javed Muhammad**, Umar Bacha. 2012. *Role of rhizobium bacteria in bio-fertilizers production*. LAP, Lambert academic publishing. Germany.
- **Javed Muhammad**, Umar bacha. 2013. *Preservative Methods for Chicken Meat and Sensory Evaluation*. LAP, Lambert academic publishing. Germany.
- Nasir Ali, Umar bacha, **Javed Muhammad**. 2013. *Mutational Analysis of p53 gene and dietary risk factors*. LAP, Lambert academic publishing. Germany.

Abstracts Published:

- **Javed Muhammad**, Masood Rabbani, Muhammad Zubair Shabbir, Khushi Muhammad, Muhammad Wasim, Malik Zia Ul Hassnain, Haroon Rasheed Chaudhry, Muhammad Tasleem Ghori, Muhammad Haisem, Muhammad Asad Ali, Tariq Jamil, Girish S Kirimanjeswara, Bhushan M Jayarao. *Spatial distribution of *Francisella tularensis* in selected districts of Punjab province, Pakistan*. 2015. 8th International conference on tularemia at Opatija, Croatia.
- **Javed Muhammad**, Masood Rabbani, Mushtaq Ahmad Gondal, Ali Ahmad Sheikh, Arfan. Ahmed, Fariha Akhtar, Asfa Rasool, Abdul Wajid, Rana Khuram Khalid, Mazhar Iqbal Khan. 2014. *Molecular characterization of *Mycoplasma gallisepticum* isolates from Pakistan*. 20th Congress of the International Organization for Mycoplasmaology – IOM. Blumenau, SC, Brazil.

- Mushtaq Ahmad Gondal, Masood Rabbani, **Javed Muhammad**, Rana Khuram Khalid, Muhammad Asim, Mazhar Iqbal Khan. 2014. Production of oil based *Mycoplasma gallisepticum* vaccine from the field isolate and its comparison with imported commercial vaccine. 20th Congress of the International Organization for Mycoplasmaology – IOM. Blumenau, SC, Brazil.
- Asfa Rasool, Masood Rabbani, Aftab Ahmad, Khushi Muhammad, **Javed Muhammad**, Ali Ahmad Sheikh, Arfan Arfan, Mazhar Iqbal Khan. Molecular characterization of *Mycoplasma synoviae* isolates from Pakistan. 20th Congress of the International Organization for Mycoplasmaology – IOM. Blumenau, SC, Brazil.
- Fayyaz Yasin, Ali Ahmad Sheikh, Masood Rabbani, Asim Aslam, Khushi Muhammad and **Javed Muhammad**. 2014. Characterization of antimicrobial resistant in *Eschericia coli* recovered from retail chicken meat from Lahore city. International Conference and Expo on “Recent developments in human nutrition” organized by University of Veterinary and Animal Sciences, Lahore
- Atif Masood Ahmad Khan, Tahir Yaqub, Masood Rabbani, khushi Muhammad, Hassan Mushtaq, Ali Ahmad Sheikh and **Javed Muhammad**. 2014. Sources of Salmonella contamination in poultry meat during processing and its resistance to antibiotics. International Conference and Expo on “Recent developments in human nutrition” organized by University of Veterinary and Animal Sciences, Lahore.
- **Javed Muhammad**, Masood Rabbani, Arfan Ahmad, Ali Ahmad Sheikh, Muhammad Asad Ali, Umar bacha and Suliman Qadir Afridi. 2013. Role of Rhizobium bacteria in Bio-fertilizers production in 2nd National Conference on “current approaches in Microbiology” organized by Microbiology department, Hazara University.
- Rana Khuram Khalid, masood Rabbani, Khushi Muhammad, Arfan Ahmad, Ai Ahmad Sheikh and **Javed Muhammad**. 2013. Factors affecting sensitivity of rapid serum agglutination antigen of *Mycoplasma gallisepticum* in 2nd National Conference on “current approaches in Microbiology” organized by Microbiology department, Hazara University.
- Masood Rabbani, Khushi Muhammad, Ali A Sheikh, Arfan Ahmad, Mushtaq Ahmad, Rana K. Khalid, **Javed Muhammad**, Asim Raza and MAzhar I. Khan. 2012. Isolation and characterization of *Mycoplasma gallisepticum* from commercial Poultry Flocks in Pakistan. 19th international Congress for Mycoplasmaology, France.
- **Javed Muhammad**, Umar Bacha and Ali Ahmad Sheikh. 2012. Assessment of Different Preservative methods for Microbial Quality and Shelf Life of Chiken Meat. 2nd International Conference Future Perspectives of Food Processing Industry in Pakistan. Department of Food Sciences. Government College University Faisalabad Pakistan.
- **Javed Muhammad**, Aftab Ahmad Anjum, Khushi Muhammad, Muhammad Wasim, masood rabbani, Arfan Ahamd, Ali Ahmad Sheikh and Muhammad Asad Ali. *In vitro* efficacy of neem, garlic and glycyrrhiza against local isolates of *Mycoplasma gallisepticum*. 2012. Pak. J. pharm.

Workshop as Organizer:

- Successfully organized a workshop on titled “Train the Trainer” from April 30th-May 4th, 2019, jointly organized by Pakistan Biological Safety Association in collaboration with Fogarty International Center, National Institute of Health, USA at Margala Hotel, Islamabad.

- Successfully organized one day Pre- Conference workshop entitled National Biosafety Policy Implementation at Department of Microbiology, University of Swabi in collaboration with Pakistan Biological Safety Association, Medical Microbiology and Infectious Diseases Society and Health Security Partners, USA from 3rd April, 2019.
- Successfully organized one day Pre- Conference workshop entitled Phage Isolation and Propagation at Department of Microbiology, University of Swabi in collaboration with Pakistan Biological Safety Association, Medical Microbiology and Infectious Diseases Society and Health Security Partners, USA from 3rd April, 2019.
- Successfully organized one day Pre- Conference workshop entitled Infection Control in Hospitals at Department of Microbiology, University of Swabi in collaboration with Pakistan Biological Safety Association, Medical Microbiology and Infectious Diseases Society and Health Security Partners, USA from 3rd April, 2019.
- Successfully organized one day Pre- Conference workshop entitled Biosafety and Biosecurity at Department of Microbiology, University of Swabi in collaboration with Pakistan Biological Safety Association, Medical Microbiology and Infectious Diseases Society and Health Security Partners, USA from 3rd April, 2019.
- Successfully organized one day Pre- Conference workshop entitled Antibiotics Stewardship at Department of Microbiology, University of Swabi in collaboration with Pakistan Biological Safety Association, Medical Microbiology and Infectious Diseases Society and Health Security Partners, USA from 3rd April, 2019.
- Successfully organized one day Pre- Conference workshop entitled Statistical Analysis and of Public Health Research data and Use of latest tools for bibliography management at Department of Microbiology, University of Swabi in collaboration with Pakistan Biological Safety Association, Medical Microbiology and Infectious Diseases Society and Health Security Partners, USA from 3rd April, 2019.
- Successfully organized one day workshop entitled Use of latest bioinformatics tools in life sciences research at Department of Microbiology, University of Swabi in collaboration with Pakistan Biological Safety Association, Medical Microbiology and Infectious Diseases Society and Health Security Partners, USA from 3rd April, 2019.
- Successfully organized a seminar entitled “XDR *Salmonella typhi*” at Department of Microbiology, University of Swabi on October 30th, 2018.
- Successfully organized an international workshop entitled “Protein modeling and computer aided drug designing” at Department of Microbiology, University of Swabi on October 3rd, 2018.
- Successfully organized a workshop on titled “Master Trainer Workshop” from 24-28th April, 2018, jointly organized by Pakistan Biological Safety Association in collaboration with Fogarty International Center, National Institute of Health, USA at Margala Hotel, Islamabad.
- Successfully organized a workshop on titled “Institutional Biosafety Committees (IBCs) Workshop” organized by Pakistan Biological Safety Association in collaboration with COMSTECH Secretariat, Islamabad, Fogarty International Center, National Institute of Health, USA and Xibios Biosafety Consulting, Belgium from February 15-16, 2018.
- Successfully organized a workshop on titled “Institutional Biosafety Committees (IBCs) Workshop” organized by Pakistan Biological Safety Association in collaboration with COMSTECH Secretariat, Islamabad, Fogarty International Center, National Institute of Health, USA and Xibios Biosafety Consulting, Belgium from February 12-13, 2018.
- Successfully organized a workshop on titled “Biosafety and Biosecurity: principles and Practices”, organized by College of Veterinary Sciences and Animal Husbandry in collaboration with Pakistan Biological Safety Association on 12th April, 2018.

- Successfully organized a workshop on titled “Biosafety Awareness Workshop” organized by Liaquat University of Medical and Health Sciences, Jamshoro in collaboration with PBSA, NIH< USA from December 28-30th, 2017.
- Successfully organized a workshop on titled “Institutional Biosafety Committees (IBCs) Workshop” organized by Pakistan Biological Safety Association in collaboration with Fogarty International Center, National Institute of Health, USA and Xibios Biosafety Consulting, Belgium at Pearl Continental Hotel, Lahore from February 15-16, 2018.
- Successfully organized a workshop on “**High Reliability Organizations to Biological Facilities**” organized by Pakistan Biological Safety Association in collaboration with Fogarty International Center, National Institute of Health, USA from 5-10th February, 2017.
- Successfully trained in and organize “**Biosafety workshop**” from December 9-12, 2015 held at Pear Continental, Peshawar by joint collaboration of Lady Reading Hospital, Peshawar, Pakistan Biological Safety association, International Council for life Sciences, Fogarty International Center and NIH, USA.
- Successfully organized an international training workshop entitled “**Biologics production using indigenous isolates of *Mycoplasma gallisepticum***” from November 25-26, 2013 at University Diagnostic Lab in collaboration with University of Connecticut, USA.
- Successfully organized a workshop titled as “**Current Approaches for the Diagnosis and Control of Avian Mycoplasma**” from September 03-04, 2012 organized by University Diagnostic Lab in collaboration with University of Connecticut, USA.
- Team member of organizing committee in international workshop on “**BIOSAFETY**” from December 18-20, 2014 organized by University Diagnostic Lab, UVAS. Pakistan Biological Safety association, International Council for life Sciences, Fogarty International Center and NIH, USA.

Workshops as a Trainer/Facilitator:

- Invited as an expert on talk entitled” SARS-CoV-2: Assessment and Prevention” by University of Swabi, Gajju Khan Medical College, Swabi, University of Haripur, Govt. Post Graduate Jahanzaib College Swat and COMSATS University Islamabad, Abbottabad Campus.
- Participated in workshop entitled “Biosafety and Infection Control in Healthcare Institutes” organized by Al-Khidmat Foundation at Hotel One, Peshawar on 1st February, 2020.
- Participated in a workshop entitled “Responsible Conduct in the Life Sciences” organized by Pakistan Biological Safety Association, Fogarty International Center, National Institutes of Health (US) at COMSTECH, Islamabad from 4-8th February, 2019.
- Participated in a workshop entitled “**Advance level biosafety workshop**” organized by University of Veterinary and Animal Sciences, Lahore in collaboration with Health Security Partners, USA at UVAS, Lahore on November 26-27, 2018.
- Participated in a workshop entitled “ **Training on biological waste management and emergency response**” organized by Gull Association, CEMB, Lahore in collaboration with Health Security Partners, USA at CEMB, Lahore on October 11-12, 2018.

- Participated in a workshop entitled “ **An awareness workshop on biological waste management**” organized by Gull Association, CEMB, Lahore in collaboration with Health Security Partners, USA at CEMB, Lahore on October 9-10, 2018.
- Participated in “**BioPrism: Train the Training Workshop**” organized by PBSA in collaboration with Fogarty International Center, National Institutes of Health (US) and Behavioral-Based Improvement Solutions (US) at Islamabad March 26-29th, 2018.
- Participated in a workshop titled “Biosafety Awareness Workshop” organized by COMSATS institute of Information Technology, Abbottabad in collaboration with PBSA, NIH, USA from January 04-06th, 2018.
- Participated in a workshop titled “Strategies to Develop Chemical and Biological Safety Cultures in Laboratories” organized by Abbottabad University of Science and Technology in collaboration with Musaji Adam and Sons, TSY Consultancy, Malaysia and American Chemical Society, USA on 12th March, 2018.
- Participated in “**BioPrism: Train the Training Workshop**” organized by PBSA in collaboration with Fogarty International Center, National Institutes of Health (US) and Behavioral-Based Improvement Solutions (US) at Islamabad November 6-10th, 2017.
- Participated in “Biosafety and Biosecurity: Principles and Practices” organized by Karakorum International University, Gilgit and Agriculture Directorate, Gilgit Baltistan region in collaboration with Pakistan Biological Safety Association on 14th October, 2017 at Directorate of Agriculture, Skardu.
- Participated in “Biosafety and Biosecurity: Principles and Practices” organized by Karakorum International University, Gilgit and Agriculture Directorate, Gilgit Baltistan region in collaboration with Pakistan Biological Safety Association on 12th October, 2017 at Agriculture Complex, Gilgit.
- Participated in “Master Trainer Workshop” organized by PBSA, NIH and Behavioral Based Solution, USA from July 29-August 03, 2017 at Margala Hotel, Islamabad.
- Participated in “**One day Biosafety cabinet Hands on Workshop**” organized by PBSA in collaboration with Dr. A. Q. Khan Institute of Biotechnology & Genetic Engineering, University of Karachi; XBIOS, Belgium; and Fogarty International Center, National Institutes of Health Science, US, on 23rd May 2017.
- Participated in “**One day hands-on “Biosafety Cabinet Workshop**” was organized by PBSA in collaboration with Lahore University of Management Sciences, Lahore; XBIOS, Belgium; and Fogarty International Center, National Institutes of Health Science, US, on 21st May 2017.
- Participated in **One day hands-on “Biosafety Cabinet Workshop**” was organized by PBSA in collaboration with National Institute for Genomics and Advanced Biotechnology (NIGAB), National Agriculture Research Center, Islamabad; XBIOS, Belgium; and Fogarty International Center, National Institutes of Health Science, US, on 20th May 2017.
- Participated in hands on training workshop “**Biosafety and Biosecurity: Principles and Practices**” organized by PBSA in collaboration with Virtual University of Pakistan, Lahore at VU, Lahore on 21st April, 2017.
- Participated in “**BioPrism: Train the Training Workshop**” organized by PBSA in collaboration with Fogarty International Center, National Institutes of Health (US) and Behavioral-Based Improvement Solutions (US) at Islamabad March 29-31st, 2017.
- Participated in “**BioPrism: Train the Training Workshop**” organized by PBSA in collaboration with Fogarty International Center, National Institutes of Health (US) and Behavioral-Based Improvement Solutions (US) at Islamabad March 26-28th, 2017.

- Participated in “**Biosafety Awareness workshop**” organized by Pakistan Biological safety Association in collaboration with Watim Dental College, Rawalpindi on 15th March, 2017 at WDC, Rawalpindi.
- Participated in “**Biosafety Awareness Workshop**” organized by Pakistan Biological Safety Association with Azad Jammu Kashmir Chapter at Mohtarma Benazir Bhutto Shaheed Medical College, Mirpur, AJK on 14th March, 2017.
- Participated in a workshop entitled “Biosafety Training in KPK with a Skill Based Approach” organized by Hazara University in collaboration with PBSA, ASM, USA and HSP, USA from November 16-18, 2016.
- Participated in workshop titled **one Day hands on Training workshop “Biorisk Management in Hospitals”** held on September 8, 2016. Organized by Medical Teaching Institute, lady reading hospital Peshawar in collaboration with Pakistan Biological Safety Association.
- Participated in workshop titled “Bioprism: A laboratory Safety Training Initiative, Train the trainer” workshop organized by Pakistan Biological Safety Association in collaboration with Fogarty International Center, National Institute of Health, USA, International council for life Sciences, Behavioral Based Improvement Solutions, USA on dated 1-5 August, 2016.
- Participated in workshop titled “**Preparing Biological Laboratories for certification in Biorisk Management**” organized by Pakistan Biological Safety Association in collaboration with Fogarty International Center, National Institute of Health, USA and Forman Christian College, Lahore, Pakistan on dated 17-19 July, 2016.
- Participated in workshop titled “**Management aspects of Biosafety and creating a culture of biosafety**” organized by Pakistan Biological Safety Association in collaboration with Fogarty International Center, National Institute of Health, USA and University of Karachi, Pakistan on dated 13-15 July, 2016.

Workshops Attended:

- Participated in a workshop titled “CRISPR/Cas Genome Editing Technology” organized by Center for OMIC Sciences, Islamia College Peshawar on 2nd May, 2019 at the Islamia College Peshawar.
- Participated in Workshop on “Influence without Authority” organized by Pakistan Biological Safety Association in collaboration with Fogarty International Center, National Institute of Health, USA and Chrome BioRisk Management Consulting, USA on 17th February, 2019 at NIH, Islamabad.
- Participated in a workshop titled “Standard Operating Procedure Writing” organized by Armed Forces Institute of Pathology, Rawalpindi in collaboration with PBSA and University of California, USA on March 18, 2017.
- Participated in a workshop on titled “Sample Collection, Transportation, and Referral of Dangerous Pathogens” organized by Medical Microbiology and Infectious Diseases Society of Pakistan and Health Security partners, USA on 15th March, 2018.
- Participated in 3-day workshop for “Biosafety and Biosecurity: An advanced Biological Risk Mitigation Training Program” jointly organized by KIBGE, University of Karachi, Pakistan Biological Safety Association and Health Security Partners, USA from August 4-6, 2017 at KIBGE, Karachi.
- Participated in workshop on “**Leadership Day in Biosafety**” organized by Behavioral Based Improvement Solution, USA on 14th April, 2017.
- Participated in workshop on “**Infection Control Awareness**” organized by Rawalpindi Medical College in collaboration with University of Health Sciences, Lahore on 20th March, 2017 during 3rd RMC International Science Conference.

- Participated in workshop on **“Standard Operating Procedures (SOP) Writing Skill”** organized by Armed Forces Institute of Pathology (AFIP), Rawalpindi in collaboration with Pakistan Biological Safety Association at department of pathology, AFIP, Rawalpindi on 18th March, 2017.
- Participated in Workshop on **“Preparing Biological Laboratories for Certification in Biorisk Management”** organized by Pakistan Biological Safety Association in collaboration with Fogarty International Center, National Institute of Health, USA, Chrome BioRisk Management Consulting, USA and Aga Khan University, Karachi from 10-13 December, 2016.
- Participated in **“Strengthening and sustaining a network of Public and Animal health clinical laboratories in Pakistan”** from September 27-29, 2016 organized by Pakistan Academy of Sciences, Islamabad in collaboration with The National Academies of Science-Engineering- Medicine, USA.
- Participated in **“Applied Biosafety Training Program Laboratory Based WET WORKSHOP”** from 20-24th May 2016 organized by Pakistan Biological Safety Association in collaboration with Fogarty International Center, National Institute of Health, USA and Quaid e Azam University, Islamabad.
- Participated in a workshop titled **“Management Aspects of Biosafety and Creating a Culture of Biosafety”** organized by PBSA, FIC, NIH and KIBGE, Karachi at Avari Towers, Karachi from July 13-15, 2016.
- Participated in regional workshop on **“Biosafety and Biosecurity in Lifesciences Research”** from 26-28 April, 2016 organized by ISESCO, COMSAT and Pakistan academy of Sciences at Islamabad.
- Participated in **“Master Training Program on Biosafety”** from March 14-18, 2016 organized by Pakistan Biological Safety Association in Collaboration with Fogarty International Center, National Institute of Health, USA, International council for life Sciences, Behavioral Based Improvement Solutions, USA and Pakistan Academy of Sciences.
- Participated in international workshop titled as **“Awareness on Biosafety”** from August 27-29, 2015 at Pakistan Academy of Sciences, Islamabad organized by Pakistan Biological Safety association, International Council for life Sciences, Fogarty International Center and NIH, USA.
- Participated in workshop titled as **“Microbe-Host Interaction Workshop”** on May 15, 2015 organized by the Huck Institutes of the Life Sciences, the Center for Molecular Immunology and Infectious Diseases, and the Department of Veterinary and Biomedical Sciences, The Pennsylvania State University, USA.
- Participated in international workshop titled as **“BIOSAFETY”** from December 18-20, 2014 organized by University Diagnostic Lab, UVAS. Pakistan Biological Safety association, International Council for life Sciences, Fogarty International Center and NIH, USA.
- Participated in workshop on **“laboratory animals hands-on workshop”** from Jun 18-19, 2014 held at University of Veterinary and Animal Sciences, Lahore.
- Participated in workshop on **“Bio-safety training workshop for young scientists”** January 18, 2014 held at Department of Biology, Forman Christian College University, Lahore, under collaboration with American Society for Microbiology.
- Participated in the workshop on **“emerging superbugs-Standardization Antimicrobial Susceptibility Testing, Surveillance and Lab Bio-safety”** from February 25-27, 2013 held at The Agha Khan University, Karachi
- Participated in the Continuing Medical Education activity on **“emerging superbugs-Standardization Antimicrobial Susceptibility Testing, Surveillance and Lab Bio-safety Hands-On workshop”** from February 25-27, 2013 held at The Agha Khan University, Karachi.

- Participated in the workshop on **“Genome extraction from soil sampling and its processing” Batch II** on February 20, 2012 held at UDL, UVAS, Lahore.
- Participated in the workshop on **“Application of bioinformatics in Understanding the Nature of Microbes”** from August 1-2, 2012 held at Quality Operation laboratory, UVAS Lahore.
- Participated in the workshop on **“Controlling Laboratory Biorisk”** from 4th to 5th January, 2012 held at Quality Operation laboratory, UVAS Lahore.
- Participated in one day workshop on **“Citation and Referencing in Research”** held on November, 3, 2011.
- Participated in the workshop on **“Cloning of Recombinant PUC-18 Plasmid into E.coli (DH 5-alpha strain)”** from September 12-17, 2011. Held at Microbiology department, UVAS Lahore.
- Successfully completed intensive practical training in **isolation and molecular characterization of Shiga toxin producing E.coli O157** held at Microbiology department, UVAS Lahore during March 1 to 5, 2011.
- Successfully participated in the workshop on **“Quality assurance of poultry vaccines”** training program held at Quality Operation laboratory, UVAS Lahore from 29th to 31st December, 2010.
- Participated in **“Student Orientation Program”** held on Sep 28th-Oct 8th, 2010 at University of Veterinary and Animal Sciences, Lahore.
- **“Diploma in Teaching Effectiveness (DTE)”** from June 15-24, 2010 at AFAQ regional office of Abbottabad.
- Participated in **“Science Exhibition”** from May 8-10, 2007 held at Hazara University Mansehra.

International Conferences:

- Presented paper titled “Physico-chemical factors affecting persistence of *Francisella tularensis* in soil” in **“2016 International Conference on Agricultural and Biological Sciences”** held at Shanghai, **China** on 23-26th July, 2016.
- Presented poster titled “Spatial distribution of soilborne *Francisella tularensis* in Punjab province, Pakistan” in **“8th international conference on Tularemia”** held at Opatija, **Croatia** on 27th Sep-1st Oct, 2015.
- Presented poster titled ““Impact Analysis of Quality Control Practices in Medical Diagnostic Labs Operational in District Lahore” in 20th Annual Conference of the European Biosafety Association held at Madrid, Spain on 27-28th April 2017.

Conferences & Seminars:

- Chief Organizer of 1st National Conference on Infectious Diseases and health Safety at Department of Microbiology, University of Swabi in collaboration with Pakistan Biological Safety Association, Medical Microbiology and Infectious Diseases Society and Health Security Partners, USA from 3-5th, April, 2019.
- Invited as a guest speaker on title “Biosafety and Biosecurity Awareness in Biomedical professionals” in Pak Health International Expo organized by Pak Health International from 24-25th February, 2018.
- Participated in “4th Conference on Computational Biology and Genomics” organized by Hazara University in collaboration with Higher Education Commission from September 27-29, 2017.
- Presented paper in “37th All Pakistan Science Conference” held on 16-17th November, 2015 at Pakistan Council of Scientific and Industrial Research (PCSIR) Labs, Lahore, Pakistan.
- Participated in **“30th Annual Graduate Exhibition”** from March 20-22, 2015 held by The Pennsylvania State University, USA.
- Participated in **“International Poultry Expo-2013”** from September 26-28, 2013 held by Pakistan Poultry Association.
- Participated in **“Current Approaches in Microbiology”** from June 27-28, 2013 held at Nathia Galli, Abbottabad.
- Participated in **“International conference of Toxicology”** from January 26-27, 2012 held at Department of Pharmacology and Toxicology, UVAS, Lahore.
- Participated in international conference on **“Latest techniques for conservation of animal genetic resources in Pakistan”** held on September 14-15, 2011 at Institute of Biochemistry & Biotechnology, UVAS, Lahore.

- Participated in the 1st National Seminar on “**Biotechnology**” on 8th June, 2008 held at University of Science and Technology Bannu.

Professional Societies Membership:

- Executive Council Member, Pakistan Society for Microbiology
- Next Generation Global Health Security Network.
- Lifetime member of Medical Microbiology & Infectious Diseases Society of Pakistan
- Life time member of Pakistan Biological Safety Association
- National Academy of Young Scientist, Pakistan
- Global Outreach member of American Society for Microbiology
- Tularemia International Society
- Medical Microbiology Association of Pakistan
- Gull’s Association, Pakistan
- Biological Safety Association of Pakistan
- BioRisk Management Association, Pakistan
- NatakMandli Drama Society, UVAS, Lahore
- Blood Donor Society, University of Swabi, Pakistan

Students under Supervision

S.No	Student Name	Program	Status
1	Mr. Akhtar Ali (UOS)	BS Honors	Completed
2	Mr. Jasim Khan (UOS)	BS Honors	Completed
3	Mr. Abdul Hadi (UOS)	BS Honors	Completed
4	Mr. Shahbaz Hussain (UOS)	M.Phil.	In Progress
5	Mr. Habibu Rahman (UOS)	M.Phil.	In Progress
6	Mr. Ilyas Ahmed (UOS)	M.Phil.	In Progress
7	Mr. Muhammad Mushtaq (UOS)	M.Phil.	In Progress
9	Mr. Muhammad Jahangir VU, Lahore) (External Supervisor)	M.Phil	In Progress
10	Mr. Ijaz Ahmad	BS Honors	In Progress
11	Mr. Shahzad Ahmad	BS Honors	In Progress
12	Mr. Muhammad Asim	BS Honors	In Progress
13	Mr. Muhammad Nasir	BS Honors	In Progress

Additional duties

Serving as an Exam Coordinator at Department of Microbiology, University of Swabi from 1st July, 2018 to 28th July, 2020.