


DR. SAJID UMAR, DVM, M.Phil, PhD

TEL: +8615250189233	Email: sajid.umar@dukekunshan.edu.cn	Home: Pakistan/China
	<ul style="list-style-type: none"> Multifaceted work experience in Veterinary and Public health since 2009 Extensive experience in laboratory diagnostics and management of BSL-2 labs Teaching and training of undergraduate students since 2009 Global and country-level research on respiratory viruses at human animal interface Cross-disciplinary scientific and research expertise Deputy director of One Health Research & training network 	

RESEARCH INTERESTS & EXPERTISE

<ul style="list-style-type: none"> Pathology-Virology Host- Pathogen interactions Epidemiology & Disease surveillance Veterinary Public Health Zoonoses-Reverse zoonosis 	<ul style="list-style-type: none"> Emerging Infectious Diseases One Health Viruses Evolution Antimicrobial Resistance Molecular Diagnostics
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EDUCATION

<ul style="list-style-type: none"> Ph.D (Virology, Pathology) <i>National Veterinary School of Toulouse, France</i> 	2014-2017
<ul style="list-style-type: none"> M.Phil. (Pathology) <i>University of Veterinary & Animal Science (UVAS), Lahore, Pakistan</i> 	2009-2011
<ul style="list-style-type: none"> Bachelor's in Veterinary Medicine (DVM) <i>University of Veterinary & Animal Science (UVAS), Lahore, Pakistan</i> 	2003-2008

PROFESSIONAL EXPERIENCE

<ul style="list-style-type: none"> Visiting Assistant Professor of Global health Global Health Research Center, One Health Research Laboratory <i>Duke Kunshan University, Kunshan, China</i> 	2022- till date
<ul style="list-style-type: none"> Postdoctoral Fellow Global Health Research Center, One Health Research Laboratory <i>Duke Kunshan University, Kunshan, China</i> 	2020-2022
<ul style="list-style-type: none"> Postdoctoral Fellow <i>Department of Virology, University of Istanbul, Turkey</i> 	2018-2019
<ul style="list-style-type: none"> Lecturer (Department of Pathology) <i>PMAS Arid Agriculture University, Rawalpindi Pakistan</i> 	2012-2020
<ul style="list-style-type: none"> Teaching Assistant (Department of Pathology) <i>University of Veterinary & Animal Science, Lahore Pakistan</i> 	2009-2011
<ul style="list-style-type: none"> Student Intern (Department of Pathology) <i>University of Veterinary & Animal Science, Lahore Pakistan</i> 	2008-2009

CERTIFICATION

<ul style="list-style-type: none"> BSL-2 Laboratory & Biosafety Certification <i>Duke Kunshan University, Kunshan, China</i> 	2020-2021
<ul style="list-style-type: none"> Postdoctoral Researcher Certification <i>Department of Virology, University of Istanbul, Turkey</i> 	2018-2019
<ul style="list-style-type: none"> Use of Laboratory Animals in Research Certification <i>National Veterinary School of Toulouse, France</i> 	2014-2015

<ul style="list-style-type: none"> • Molecular Diagnostics Certification <i>University of Veterinary & Animal Science, Lahore, Pakistan</i> 	2009-2010
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TEACHING EXPERIENCE

Year	Course title	Course level
2021-2022	<ul style="list-style-type: none"> • BIOL-308 Evolution of Infectious Diseases <i>Duke Kunshan University, China</i> 	Undergraduate
2022-2023	<ul style="list-style-type: none"> • GLHLTH-306 Evolution of Health & Diseases <i>Duke Kunshan University, China</i> 	Undergraduate
2023-2024	<ul style="list-style-type: none"> • BIOL-405 Microbial Ecology <i>Duke Kunshan University, China</i> 	Undergraduate
2023-2024	<ul style="list-style-type: none"> • GLHLTH-306 Evolution of Health & Diseases <i>Duke Kunshan University, China</i> 	Undergraduate
2024-2025	<ul style="list-style-type: none"> • GLHLTH-306 Evolution of Health & Diseases <i>Duke Kunshan University, China</i> 	Undergraduate
2024-2025	<ul style="list-style-type: none"> • BIOL-308 Evolution of Infectious Diseases <i>Duke Kunshan University, China</i> 	Undergraduate

STUDENT MENTORING

<p>Undergraduate Student training on Laboratory diagnostics. Kuanfu Chen, Junyi Li, Qisen Guo, Qi Guo, Yixi Cheng, Semin Kim, Zhenkun Fang, Doha El Jerrari, Shelley Marie Pleva, Marwa Mouzahim</p>	2021-2023
<p>Research Independent Study (Co-Mentor) Assessment of Environmental Factors Associated with Antibiotic Resistance Genes (ARGs) in the Yangtze Delta, China Students: Jiazheng Miao, Yikai Ling, Xiaoyuan Chen, Siyuan Wu</p>	2022-2023
<p>Research Independent Study (Mentor) Research Independent Study (RIS) entitled "Molecular detection and characterization of feline calicivirus (FCV) and feline herpesvirus (FHV-1) from cats in Kunshan, China Students: Semin Kim, Yixi Cheng, Zhenkun Fang</p>	2022-2023
<p>MSc. Student mentorship Exploring The Colistin and Carbapenem Resistance in Extended-Spectrum B-Lactamase Producing <i>Klebsiella Pneumoniae</i> Isolates from Chicken in Kunshan, China and Nairobi, Kenya Student: Sophia Atingo Kuve</p>	2022-2023
<p>MSc. Student mentorship Molecular characterization of canine distemper and influenza viruses from Turkey Student: Xueying Liu</p>	2023-2024
<p>Signature work project (Mentor) Understanding differential gene expression and transcriptome profiling of human patients with COVID-19 Student: Semin Kim</p>	2023-2024
<p>Signature work project (Mentor) Genetic Analysis of Feline Panleukopenia Virus Full Length VP2 Gene in Domestic Cats Student: Ruoyi Wang</p>	2023-2024
<p>Signature work project (Mentor) Evolutionary and genetic analysis of porcine respiratory & reproductive syndrome virus in China Student: Ethan Tang</p>	2023-2024
<p>Signature work project (Mentor)</p>	2023-2024

An epidemiological study of *Streptococcus suis* prevalence among pigs and slaughterhouse workers in China

Student: Marwa Mouzahim

Signature work project (Mentor)

Exploring molecular evolution and coinfection of blood borne viruses in Pakistan.

2024-2025

Student: Shelly Marie Pleva

PERSONAL MEETINGS

- **10th Hafez International Symposium on Turkey Diseases** 2014
Berlin Germany
Umar et al. Study on pathological changes induced by low pathogenic Avian Influenza (H9N2) viruses in poultry (*Poster presentation*)
 - **XXII European Symposium on the Quality of Poultry Meat and XVI European Symposium on the Quality of Eggs and Egg Products** 2015
Westotel, Nantes, France
Umar et al. Prevalence of *Salmonella enteritidis* in hatcheries and broiler retail outlets in Rawalpindi, Pakistan (*Poster presentation*)
 - **10th Hafez 8th Hafez International Symposium on Turkey production** 2015
Berlin Germany
Umar et al. Study on pathological changes induced by influenza viruses in chicken (*Poster presentation*)
 - **1st International Conference on Necrotic Enteritis in Poultry Copenhagen, Denmark** 2015
Copenhagen, Denmark
Umar et al. Pathogenesis of *Clostridium perfringens* in poultry models (*Oral presentation*)
 - **7th Orthomyxoviridae conference** 2015
Toulouse, France.
Umar et al. Low pathogenic avian influenza virus experimental infection in the turkey model: effect of the route of inoculation on the course of disease (*Poster presentation*)
 - **The potential for poultry production in developing countries.** 2015
Antalya, Turkey
Umar et al. Avian influenza pathogenesis in Turkey (*Oral presentation*)
 - **11th Hafez International Symposium on Turkey Diseases** 2016
Berlin Germany
Umar et al. Low pathogenic avian influenza virus experimental infection in the turkey model: effect of the route of inoculation on the course of disease (*Oral presentation*)
 - **9th International symposium on Avian corona- and pneumoviruses and complicating pathogens** 2016
Utrecht (Leusden), Netherlands.
Umar et al. Molecular Epidemiology of Avian Infectious Bronchitis and Metapneumoviruses in Pakistan (*Poster presentation*)
 - **2nd international congress of Veterinary Microbiology** 2018
Antalya, Turkey
Umar et al. First molecular characterization of avian metapneumovirus in Turkish broiler flocks (*Poster presentation*)
 - **8th Calicivirus Conference Rotterdam, The Netherlands, 7 -11 May 2023** 2023
Umar et al. Molecular Epidemiology and Phylogenetic Analysis of Feline Calicivirus (*Poster presentation*)
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- **International conference on “Developing Sustainable Universal Health Coverage in the Era of Achieving Health Related SDG by 2023”** on October 27-28, 2023 (moderator) 2023
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TRAINING & WORKSHOPS

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- Rx One Health training program University of California Davis, June 23-July 7, 2024 2024
 - One Health field epidemiology program Penang Malaysia May 6-May 10, 2024 2024
 - Appropriate Use of Research Funding - Accessing and Spending Your External and Internal Funding organized by Duke Kunshan University finance and procurement office
 - Workgroup Meeting COST Action FA1207: Towards Control of Avian Coronaviruses: Strategies for Diagnosis, Surveillance and Vaccination, Zagreb, Croatia. 2016
 - Recent scientific advances on Avian Coronaviruses and complicating pathogens, Utrecht (Leusden), Netherlands. 2016
 - Writing for scientific publications in Veterinary Medicine, National Veterinary School of Toulouse, France. 2016
 - Scientific writing and research skills, (COST ACTION, FA 1207), Department of Infection and Immunity Luxembourg Institute of Health 29, rue Henri Koch, L-4354 Esch-sur-Alzette Luxembourg. 2016
 - Quality assurance in research and good laboratory practice, University of Paul Sabatier Toulouse, France. 2015
 - Image acquisition and analysis, University of Paul Sabatier Toulouse, France. 2015
 - Computational analysis of sequences, University of Paul Sabatier Toulouse, France. 2015
 - *To control the scientific and technical information in research*, University of Paul Sabatier Toulouse, France. 2014
 - Statistical basis for research: a practical approach, University of Paul Sabatier Toulouse, France. 2014
 - Laboratory animal Use and protection, National Veterinary School of Toulouse, France. 2014
 - Creating scientific audio-visual animations, Ecole de Cinema D’Animation (ECA) 5 Rue Georges Vedel 31300 Toulouse, France. 2014
 - Scientific writing & Editing, University of Paul Sabatier (UPS), Toulouse, France 2014
 - Preparing for oral presentation in conference, University of Paul Sabatier (UPS), Toulouse, France. 2014
 - Young researcher’s skill development, National University of Sciences & Technology (NUST) Islamabad, Pakistan. 2011
 - National Biotechnology Exhibition and seminar, Institute of Biochemistry & Biotechnology, University of Veterinary and Animal Sciences, Lahore, Pakistan. 2010
 - Primer designing for microbial identification using PCR, University of Veterinary and Animal Sciences, Lahore, Pakistan. 2009
 - Molecular techniques (PCR/RT-PCR for diagnosis of animal microbial diseases, University of Veterinary and Animal Sciences, Lahore, Pakistan. 2009
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PUBLICATIONS

1. **Umar, S.**, et al 2024. Burden of common respiratory pathogens among cats in China. *Journal of Veterinary Medicine and Science* DOI: 10.1002/vms3.70082
2. Ahmed A, Saqlain S, Rasool A, Muhammad S, **Umar S.** Avian Influenza Virus (H5N1) Was Not Detected Among Dairy Cattle and Farm Workers in Pakistan. *Influenza Other Respir Viruses*. 2024 May;18(5):e13317. doi: 10.1111/irv.13317.
3. **Umar S**, Kim S, Gao D, Chen P. Evidence of Reverse Zoonotic Transmission of Human Seasonal Influenza A Virus (H1N1, H3N2) Among Cats. *Influenza Other Respir Viruses*. 2024 Apr;18(4):e13296. doi: 10.1111/irv.13296.
4. **Umar S**, Muhammad S, Gao D, Chen P. SARS-CoV-2 Reverse Zoonosis Among Cats in China: A One Health Investigation. *Influenza Other Respir Viruses*. 2024 May;18(5):e13306. doi: 10.1111/irv.13306.
5. Wang R, Gao D, Chen P, Mouzahim M, Muhammad S, Weidong Y, Zhongqi Q, Yilmaz A, Yilmaz H, **Umar S.** Genetic analysis of feline parvovirus reveals predominance of feline parvovirus-G1 group among cats in China. *J Vet Med Sci*. 2024 Jul 15. doi: 10.1292/jvms.24-0138.
6. Kim, S., Cheng, Y., Fang, Z. **Umar.S. et al.** First report of molecular epidemiology and phylogenetic characteristics of feline herpesvirus (FHV-1) from naturally infected cats in Kunshan, China. *Virology* **21**, 115 (2024). <https://doi.org/10.1186/s12985-024-02391-1>.
7. Kim, S., Cheng, Y., **Umar. S.**, et al (2024) Molecular Epidemiology and Phylogenetic Analysis of Feline Calicivirus in Kunshan, China. *Virology Journal* **21**, 50 (2024). <https://doi.org/10.1186/s12985-024-02319-9>
8. **Umar, S.**, Gao, D., Kim, S. *et al.* Molecular characterization of canine parvovirus type 2 (CPV2) reveals a high prevalence of the CPV2c genotype among dogs suffering from diarrhea. *Animal Diseases* **4**, 1 (2024). <https://doi.org/10.1186/s44149-023-00107-6>.
9. Anderson, B., Thanaporn, M., **Umar, S.**, Barne, A., Gray GC (2023) Reverse Zoonotic Transmission (Zooanthropozoonosis): An Increasing Threat to Animal Health. An Increasing Threat to Animal Health. In: Sing, A. (eds) *Zoonoses: Infections Affecting Humans and Animals*. Springer, Cham. https://doi.org/10.1007/978-3-030-85877-3_59-1
10. **Umar, S.**, Yuan, R., Li, Y., Gao, D., & Anderson, B. D. (2023). No Influenza D virus and human seasonal influenza A virus (H1N1, H3N2) were detected among dogs, Kunshan, China. *Acta Veterinaria Eurasia*, **49**(3), 163-164.
11. **Umar S**, Ma MJ, Gray GC. Influenza D virus was not detected among prospectively studied swine farm in multiple provinces of China. *Influenza Other Respir Viruses*. 2023 Nov 12;17(11):e13223. doi: 10.1111/irv.13223
12. Jiazheng Miao, Yikai Ling, Xiaoyuan Chen, Siyuan Wu, Xinyue Liu, Shixin Xu, **Umar, S.**, Benjamin D. Anderson Assessing the Nonlinear Association of Environmental Factors with Antibiotic Resistance Genes (ARGs) in the Yangtze River Mouth, China. *Scientific reports* (2023), *Sci Rep*. 2023 Nov 21;13(1):20367. doi: 10.1038/s41598-023-45973-9.
13. **Umar, S.**, Yang, R., Wang, X. et al. Molecular epidemiology and characteristics of respiratory syncytial virus among hospitalized children in Guangzhou, China. *Virology* **20**, 272 (2023). <https://doi.org/10.1186/s12985-023-02227-4>.
14. **Umar, S**; Anderson, B; Chen, K; Gray, G.C. Metagenomic Analysis of Endemic Viruses in Oral Secretions from Chinese Pigs. *Veterinary Medicine & Science* **2022**, **8**(5): 1982-1992. doi: 10.1002/vms3.869.
15. Wang, X.; Wang, D.; **Umar, S.**; Qin, S.; Ling, Q.; Gray, G. C.; Liu, Y., Molecular typing of human adenoviruses among hospitalized patients with respiratory tract infections in a tertiary Hospital in Guangzhou, China between 2017 and 2019. *BMC Infectious Diseases* **2021**, **21**, (1), 748
16. Yilmaz, A., **Umar, S.**, Turan, N., Richt J.A., Yilmaz, H, Current scenario of viral diseases of cattle in Turkey and vaccination strategies in cattle *Journal of infection in developing countries* **2022**, **16**(8):1230-1242. doi: 10.3855/jidc.14767.
17. Cizmecigil, U. Y.; **Umar, S.**; Yilmaz, A.; Bayraktar, E.; Turan, N.; Tali, B.; Aydin, O.; Tali, H. E.; Yaramanoglu, M.;

- Yilmaz, S. G.; Kolukisa, A.; Sadeyen, J.-R.; Iqbal, M.; Yilmaz, H., Characterisation of Fowl Adenovirus (FAdV-8b) Strain Concerning the Geographic Analysis and Pathological Lesions Associated with Inclusion Body Hepatitis in Broiler Flocks in Turkey. *Journal of Veterinary Research* **2020**, 64, (2), 231-237
18. Yilmaz, A.; Turan, N.; Bayraktar, E.; Tali, H. E.; Aydin, O.; **Umar, S.**; Cakan, B.; Sadeyen, J. R.; Baigent, S.; Iqbal, M.; Nair, V.; Yilmaz, H., Molecular characterisation and phylogenetic analysis of Marek's disease virus in Turkish layer chickens. *British Poultry Science* **2020**, 61, (5), 523-530.
 19. **Umar S.**, O. H., Bayraktar E., Ozturk Gurgun H., Sigirci B.D., Satir E., Ozkan K., Turan N., Yilmaz A., Gurel A., Ak S., Cetinkaya B., Yilmaz H., First report on the molecular detection, phylogeny, virological and pathological investigations of Avibacterium paragallinarum in chickens in Turkey. *Medycyna Weterynaryjna* **2020**, 74, (4), 226-231
 20. Yilmaz, A.; **Umar, S.**; Turan, N.; Aydin, O.; Tali, H. E.; Oguzoglu, T. C.; Yilmaz, H.; Richt, J. A.; Ducatez, M. F., First report of influenza D virus infection in Turkish cattle with respiratory disease. *Research Veterinary Science* **2020**, 130, 98-102
 21. Ali, S., S. S., Muhammad Imran, Muhammad Rizwan, Khizar Iqbal, Ghulam Qadir, Haroon Ahmad, **Umar, S.**, Waseem Ahmad Khan, Iahtasham Khan and Heinrich Neubauer, Detection of Brucella antibodies in selected wild animals and avian species in Pakistan. *Indian Journal of Animal Research* **2020**, 54, 478-481.
 22. **Umar, S.**; Teillaud, A.; Aslam, H. B.; Guerin, J.L.; Ducatez, M. F., Molecular epidemiology of respiratory viruses in commercial chicken flocks in Pakistan from 2014 through to 2016. *BMC Veterinary Research* **2019**, 15, (1), 351
 23. Bayraktar, E.; Umar, S.; Yilmaz, A.; Turan, N.; Yilmaz, H., Current scenario of viral diseases in Turkish poultry industry. *World's Poultry Science Journal* **2019**, 75, (4), 515-534.
 24. Zia, N., Umm-i- Habiba, Ayesha Maqbool, Muhammad Safdar, Altaf Mehmood, **Umar, S.** Detection and phylogeny of fowl adenovirus associated with hydropericardium hepatitis syndrome in broilers. *Pakistan Journal of Zoology* **2019**, 51, (6), 1999-2399
 25. Habiba, U., Nida Zia, Ayesha Maqbool, Muhammad Safdar, Altaf Mehmood, **Umar, S.** Detection and phylogeny of infectious bursal disease virus (IBDV) during field outbreaks in broilers. *Pakistan Journal of Zoology* **2019**, 52, 659-667
 26. Maan, M.K., G. M., Munibullah and **Umar, S.**, Bovine Ocular Squamous Cell Carcinoma: Clinico-pathological Report of Twenty Five Cases. *Pakistan Journal of Zoology* **2019**, 51, 387-389.
 27. Mahmood, S., M. Y., A. Aslam, A.A. Anjum, **Umar, S.**, Aamerzish Mushtaq and M.L. Sohail, Evidence of Biological Detoxification Potential of Saccharomyces cerevisiae against Aflatoxin B1 in Quails (Coturnix japonica). *Pakistan Journal of Zoology* **2019**, 51, 887-893
 28. Azeem, T., M. Y. T., Asim Aslam, Sajjad Ahmed, Salman Ahmed Abid, Abdullah Iqbal, Naeem Akhtar, Muhammad Saleem, Aamerzish Mushtaq and **Umar, S.**, Hematobiochemical Disorder in Camels Suffering from different Hemoparasites. *Pakistan Journal of Zoology* **2019**, 51, 591-596.
 29. Naveed, A.; Ali, S.; Ahmed, H.; Simsek, S.; Rizwan, M.; Kaleem, I.; Gondal, M. A.; Shabbir, A.; Pervaiz, F.; Khan, M. A.; Nadeem, M. S.; Afzaal, M. S.; **Umar, S.**, Seroprevalence and Risk Factors of Toxoplasma gondii in Wild Birds of Punjab Province, Pakistan. *Journal of Wildlife Diseases* **2019**, 55, (1), 129-135.
 30. Bayraktar, E.; **Umar, S.**; Yilmaz, A.; Turan, N.; Franzo, G.; Tucciarone, C. M.; Cecchinato, M.; Cakan, B.; Iqbal, M.; Yilmaz, H., First Molecular Characterization of Avian Metapneumovirus (aMPV) in Turkish Broiler Flocks. *Avian Diseases* **2018**, 62, (4), 425-430.
 31. Daud, S.; Ahmed, N.; Naudhani, S.; Younus, M.; Manzoor, S.; Firyal, S.; Yaqub, T.; Hashmi, A. S.; Riaz ul, A.; Wasim, M.; **Umar, S.**, In-Silico Analysis of Gene ALS2 Genetic Variants Identified in the Affected Horses and Humans With Motor Neuron Disease. *Journal of Equine Veterinary Science* **2018**, 62, 60-65.
 32. Yaqoob, M.; Wang, L. P.; Kashif, J.; Memon, J.; **Umar, S.**; Iqbal, M. F.; Fiaz, M.; Lu, C. P., Genetic characterization of phenicol-resistant Escherichia coli and role of wild-type repressor/regulator gene (acrR) on phenicol resistance. *Folia Microbiol (Praha)* **2018**, 63, (4), 443-449.
 33. Yasmin, F.; Yaqub, T.; Idrees, M.; Shahzad, W.; Hashmi, A. S.; Aqil, K.; Mukhtar, N.; Zahoor, M. Y.; Akhtar, N.; **Umar, S.**, Cloning and Expression of NS3 Gene of Pakistani Isolate Type 2 Dengue Virus. *Journal of Veterinary Research* **2018**, 62, (1), 17-26.
 34. Yasmin F, Y. T., Khan I, Shahzad W, Saeed Hashmi A, **Umar, S.** Antiviral Activity of Thiazolide Derivatives Against Dengue Virus in Huh-7 Cell Line *Jundishapur Journal of Microbiology* **2018**, 11, (2), e62467.
 35. Nisa, Q. M. Y., Azhar Maqbool and **Umar, S.** Mycoplasma gallisepticum Modifies Virus Shedding and Immune Response of Newcastle Disease Virus in Broilers. *Indian Journal of animal Research* **2018**.

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36. Nisa, Q. M. Y., Azhar Maqbool and **Umar, S** Pathological alterations during co-infection of Newcastle disease virus with Escherichia coli in broiler chicken. *Pakistan Journal of Zoology* **2018**, 50, 495-503.
 37. Aqil, A., Muti-ur-Rehman Khan, Rizwan Qayyum, Abdul Wahab Manzoor, Farkhanda Yasmeen, Muhammad Luqman Sohail, **Umar,S.**, Patho-biological studies of PPR virus in experimentally infected goats with reference to immunomodulatory activity of Nigella. Sativa seeds. *Journal of Animal and Plant Sciences* **2018**, 28, 474-484
 38. Imran, M., Ahmed, S., Ditta, Y., Mehmood, S., Khan, M., Gillani, S., Rasool, Z., Sohail, M., Mushtaq, A., & **Umar, S.**, Effect of microencapsulated butyric acid supplementation on growth performance, ileal digestibility of protein, duodenal morphology and immunity in broilers. *Journal of the Hellenic Veterinary Medical Society* **2018**, 69, (3), 1109-1116
 39. **Umar,S;** Ana Triana Maiyah , Mehwish Shareef, Hajra Qadir, Qamar un Nisa Seema Abbas. Susceptibility of avian pathogenic *Escherichia Coli* from zoo birds in Indonesia to antibiotics and disinfectants. *Pakistan Journal of Pharmaceutical Sciences* **2018**, 31(2), 593-598.
 40. **Umar, S;** Muhammad Irfan Khan, Muhammad Younus, Kiran Aqil, Rizwan Qayyum, Muhammad Yaqoob, Muhammad Tanveer Munir, Muhammad Ali Abdullah Shah. Safety of Fenbendazole in common peafowl (*Pavo cristatus*) *Pakistan Journal of Pharmaceutical sciences* **2018**, 31(1):159-167.
 41. Rehman, Z. U.; Meng, C.; Sun, Y.; Mahrose, K. M.; **Umar, S.**; Ding, C.; Munir, M., Pathobiology of Avian avulavirus 1: special focus on waterfowl. *Veterinary Research* **2018**, 49, (1), 94.
 42. **Umar, S.**; Guerin, J. L.; Ducatez, M. F., Low Pathogenic Avian Influenza and Coinfecting Pathogens: A Review of Experimental Infections in Avian Models. *Avian Diseases* **2017**, 61, (1), 3-15.
 43. Belkasm, S. F. Z.; Fellahi, S.; **Umar, S.**; Delpont, M.; Delverdier, M.; Lucas, M. N.; Bleuart, C.; Kichou, F.; Nassik, S.; Guerin, J. L.; Fihri, O. F.; Ducatez, M. F.; El Houadfi, M., Efficacy of Massachusetts and 793B Vaccines Against Infectious Bronchitis Moroccan-Italy 02 Virus in Specific-Pathogen-Free Chickens and Commercial Broilers. *Avian Diseases* **2017**, 61, (4), 466-471.
 44. Yaqoob, M.; Wang, L. P.; Memon, J.; Kashif, J.; **Umar, S.**; Naseer, Z.; Iqbal, M. F.; Fiaz, M.; Lu, C. P., Role of topoisomerase mutations, plasmid mediated resistance (qnr) and acrAB efflux pump in fluoroquinolone resistant clinical isolates of avian Escherichia coli. *Molecular Genetics, Microbiology and Virology* **2017**, 32, (1), 49-54
 45. Aqil, K.M.-u. R. K., Asim Aslam, Aqeel Javeed, Rizwan Qayyum, Farooque Yousaf, Farkhanda Yasmeen, Muhammad Luqman Sohail, **Umar,S.**, In vitro Antiviral activity of Nigella Sativa against peste des petits ruminants (PPR) virus. *Pakistan's Journal of zoology.* **2017**, 50, 2223-2228.
 46. Khan,NU., M. H. S., Aneela Zameer Durrani, Nisar Ahmad, Ayesha Hassan, Sultan Ayaz, **Umar,S.**, Muhammad Luqman Sohail, Muhammad Shafee, Ikramullah Khan, Mumtaz Ali Khan, Azmat Ullah Khan, Naimat Ullah Malik and Abdul Razzaq, Cryptosporidium: An Emerging Zoonosis in Southern Khyber Pakhtunkhwa (KPK), Pakistan. *Pakistan Journal of Zoology* **2017**, 49, 1455-1461.
 47. Rehman, Z. U.; Meng, C.; **Umar, S.**; Mahrose, K. M.; Ding, C.; Munir, M., Mast cells and innate immunity: master troupes of the avian immune system. *World's Poultry Science Journal* **2017**, 73, (3), 621-632.
 48. Rehman, Z. U.; **Umar, S.**; Meng, C.; Ullah, Z.; Riaz, F.; Rehman, S. U.; Ding, C., Dendritic cell harmonised immunity to poultry pathogens; a review. *World's Poultry Science Journal* **2017**, 73, (3), 581-590.
 49. Ahmed, H. A., Ali, A., Ali, A., Abid, S.A. and **Umar, S.**, Surgical Correction of Intermittent Unilateral Hind Limb Extension in Buffalo and Cattle. *Pakistan Journal of Zoology* **2017**, 49, 717-719.
 50. Ali, S., Neubauer, H., Melzer, F., Khan, I., Akhter, S, Jamil, T. and **Umar, S**, Molecular Identification of Bovine Brucellosis Causing Organisms at Selected Private Farms in Pothohar Plateau, Pakistan. *Pakistan Journal of Zoology* **2017**, 49, 1111-1114
 51. Ali, S.; Akhter, S.; Neubauer, H.; Melzer, F.; Khan, I.; Abatih, E. N.; El-Adawy, H.; Irfan, M.; Muhammad, A.; Akbar, M. W.; **Umar, S.**; Ali, Q.; Iqbal, M. N.; Mahmood, A.; Ahmed, H., Seroprevalence and risk factors associated with bovine brucellosis in the Potohar Plateau, Pakistan. *BMC Research Notes* **2017**, 10, (1), 73
 52. Prince,K., M. S. K., Muhammad Ijaz, Aftab Ahmad Anjum, Muhammad Asad Ali, Jawaria Ali Khan, Nisar Ahmad, Rais Ahmed, Aamerzish Mushtaq, **Umar,S** and Yung-Fu Chang,, Dynamics of Selenium Deficiency in Bovines in District Kasur, Punjab, Pakistan. *Pakistan Journal of Zoology* **2017**, 50, 611-617.
 53. Sohail; Mashwani, Z. R. U. R.; Raja, N. I.; Ghaffar, A.; Shah, M. A.; Yameen, M.; **Umar, S.**; Sohail, M. L., Sliver Nanoparticle; A Promising Anti-Mosquito's Agent: A Review. *Nanoscience and Nanotechnology Letters* **2017**, 9, (12), 1875-1890.
 54. Usman, M.; Sarwar, F.; **Umar, S.**; Subhan, S.; Sohail, M. L.; Younus, M.; Shah, M. A. A clinical Survey of viral
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- respiratory diseases of commercial poultry in Pakistan. *Journal of Animal & Plant Sciences* **2017**, 27 (6) 2086-2089.
55. Rehman, Z. U.; Tayyab Aziz, Shaukat Ali Bhatti, Gulraiz Ahmad, Jamil Kamran, **Umar,S**; Chunchun Meng and Chan Ding (2016) Effect of Beta Mannanase on the Performance and Digestibility of Broilerr. *Asian Journal of Animal and Veterinary Advances* **2016**, 11, 393-398.
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UNDERDEVELOPMENT/UNDER REVIEW

<ul style="list-style-type: none">• Anderson, B., Gleason, J., Umar, S., Gray GC (2021) Molecular characterization of Adenovirus from hospitalized patients in North Carolina US (<i>under development</i>)
<ul style="list-style-type: none">• Anderson, B., Thanaporn, M., Umar, S., Gray GC (2021) A review article on swine pathogens in China (<i>under development</i>)
<ul style="list-style-type: none">• Benjamin D. Anderson, Dingmei Zhang, Myagmarsukh Yondon, Umar, S., Ege K. Duman, Nancy Henshaw, and Gregory C.Gray (2021) Feline Kidney Cells (CRFK) are Permissive to Adenovirus Type 1 Isolated from Human Clinical Samples (<i>under development for Clinical Virology</i>)
<ul style="list-style-type: none">• Umar et al (2025) First report of Influenza D virus detection among cattle and cattle workers in Pakistan.
<ul style="list-style-type: none">• Umar et al (2025) Burden of common respiratory pathogens in dogs in China
<ul style="list-style-type: none">• Mouzahim et al (2025) An epidemiological study of <i>Streptococcus suis</i> prevalence among pigs and slaughterhouse workers in China
<ul style="list-style-type: none">• Pleva et al (2025) Exploring molecular evolution and coinfection of blood borne viruses in Pakistan
<ul style="list-style-type: none">• Yilmaz et al (2025) Molecular characterization of Infectious laryngotracheitis virus in Turkish poultry flocks
<ul style="list-style-type: none">• Yilmaz et al (2025) Molecular characterization of feline coronaviruses in Istanbul and associations with lifestyle, clinical and pathological factors

RESEARCH FUNDING

1. **Umar.S** (MSc Student) Toxicopathological and immunosuppressive effects induced by concurrent exposure of AflatoxinB1 and Ochratoxin A in broilers. MSc. Fellowship award (UVAS-087), University of Veterinary & Animal Science, Lahore Pakistan funds 2009-2011 (PI: Prof. Younus Rana)
2. **Umar.S** (PhD Student) Avian influenza and co-infections: investigation of the interactions in the poultry model. PhD Fellowship Award INRA, UMR 1225, National Veterinary School Toulouse, France 2014-2017 (PI: Prof. Maxence Delverdier)
3. **Umar.S** (Postdoc fellow) Molecular detection and genetic diversity animal viruses in Turkey. Postdoctoral fellowship Award-Tubitak Turkey 2018-2020 (PI: Prof. Huseyin Yilmaz)
4. **Umar.S** (Postdoc fellow) Multiple Virus Coinfections Detected in Pig Oral Secretion Samples Collected from Swine Farms in China. DKU-Postdoctoral fellowship award (NIH/NIAID grant R01AI108993-01A1, Duke Kunshan University, China (PI: Prof. Gregory Gray/Benjamin Anderson)
5. **Umar. S** (PI) Molecular detection of routine and novel canine respiratory viruses in Kunshan, China Hou Tu Research Funding (50000 RMB) 2022-2023.
6. Benjamin Anderson, **Umar. S** (Co- PI) Detecting Routine and Novel Respiratory Viruses in China Guangdong Provincial Hospital of Chinese Medicine Guangzhou, China (0.5 million RMB) 2021-2022
7. **Umar. S** (PI) Epidemiological study on seasonal respiratory viruses (Influenza and Respiratory syncytial virus) in Guangdong, China. Guangdong Provincial Hospital of Chinese Medicine Guangzhou, China (0.5 million RMB, 22KCNID086) 202-2023-2024.
8. Yunguo Liu (PI), **Umar, S** (Co-PI) Molecular Detection of Multidrug Resistant Bacteria and Screening of Antimicrobial Resistance Genes. Global Health Research Center, Duke Kunshan University, China (150000 RMB 22KKSGR075)
9. Yunguo Liu (PI), **Umar, S** (Co-PI) Molecular Detection of Multidrug Resistant Bacteria and Screening of Antimicrobial Resistance Genes. Global Health Research Center, Duke Kunshan University, China (150000 RMB 23KKSGR032)
10. **Umar. S** (PI) Farmers training on control of swine diseases. MSD Animal Health, China (0.5 million RMB)

HONORS & AWARDS

- Member of Duke Kunshan University (DKU) Institutional Animal Care and Use Committee (IACUC (2021-Present))
 - Competitively awarded **Postdoctoral fellowship award** by Turkish Funding agency (TUBITAK) Turkey (2018-2019)
 - Competitively awarded 4-year **PhD fellowship** award by Campus France & HEC Pakistan for Doctoral studies in France (2014-2017)
 - **Chancellor's award** for securing first position in "MSc. Education program" (2009-2011), CGPA 4.0 out of 4.0
 - **Chancellor's award** for securing first position in "Undergraduate program" (2003-2008) CGPA 3.96 out of 4.0
 - **Certificate of excellence** (Star laureate Award) in recognition of outstanding achievements in the field of Education (2008).
 - Presented research work in various conferences held in France, Germany, Netherland, Luxembourg, Croatia, Turkey, China and Pakistan.
 - Active member of International Society for Influenza and other Respiratory Virus Diseases (ISIRV) from Jan 2022- Jan 2023
 - 2016 Young Scientist travel award by Houghton Trust, promoting research into poultry diseases. UK
 - 2015 Student travel award by World Poultry Science Journal
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