



Riaz Hussain

📍 **Work :** Department of Pathology, Faculty of Veterinary and Animal Science, The Islamia University of Bahawalpur, 63100, Bahawalpure, Pakistan

✉ **Email:** dr.riaz.hussain@iub.edu.pk 📞 **Phone:** (+92) 3217533473

📠 **Phone:** (+92) 0629255567

Gender: Male **Date of birth:** 04/03/1980 **Nationality:** Pakistani

ABOUT ME

I have vast field experience of common diseases of dairy and wildlife animals in Pakistan. I have experience to deal outbreaks of FMD, PPR, Enterotoxaemia (bovine, camelids and ovine, deer), Pneumonic Pasturellosis (bovine, camelids and ovine), Mycoplasmosis (Bovine and caprine), Brucellosis (Human and dairy animals), Blackleg and Coccidiosis (bovine and avian) on modern lines. I have command on culturing/molecular based characterizing identification of bacterial species. I have vast experience of necropsy practices and diseases of dairy animals (Camels, cattle, buffaloes, goats, sheep, deer), Avian Spp., wild animals (Lion, Bear, Monkey, Tiger, Hyena, Puma, spotted deer, Hog deer and chinkara deer, Rhinoceros, Nilgai etc.). I have specialized research interests in infectious disease of dairy and wild animals, Toxicological research especially research on Genotoxicity, evaluation of oxidative stress, antioxidant enzymes, Morphological and Nuclear ailments in Erythrocytes and Histopathology. I have also ten years of research experience in Fisheries and Aquaculture. I have over 16 years of teaching and research experience. I have also expertise on biological/Toxicological evaluation of Nanoparticles in fish/rats/rabbits.

WORK EXPERIENCE

[Current] **Professor**

The Islamia University of Bahawalpur <https://www.iub.edu.pk/department-of-pathology-faculty-of-veterinary-animal-sciences-iub>

Address: Department of Pathology, Faculty of Veterinary and Animal, The Islamia University of Bahawalpur, Bahawalpur, 63100, Bahawalpur, Pakistan | **Email address:** dr.riaz.hussain@iub.edu.pk | **Name of unit or department:** Department of Pathology, Faculty of Veterinary and Animal | **Business or sector:** Agriculture, forestry and fishing

Link: https://drive.google.com/drive/folders/1uH_KFVVUS-3pLZrEphIfAUHR6NV3vEmK?usp=drive_link

Teaching

- Develop and deliver lectures, seminars, and workshops to undergraduate and graduate students.
- Design and update course materials, syllabi, and curriculum to reflect current knowledge and industry trends.
- Assess student performance through assignments, exams, and projects.
- Provide guidance and mentorship to students, including advising on academic and career matters.
- Foster an inclusive and engaging learning environment.

Research

- Conduct original research in the field of pathology and microbiology, contributing to the advancement of knowledge.
- Publish research findings in peer-reviewed journals and present them at conferences.
- Secure research funding through grant applications and proposals.
- Collaborate with colleagues, students, and external partners on research projects.

Academic Leadership

- Participate in departmental and university committees and meetings.
- Contribute to the development of academic policies and programs.
- Serve as thesis or dissertation advisor for graduate students.
- Provide input on faculty hiring and promotion decisions.
- Lead academic initiatives and projects within the department and university.

Community Engagement

- Engage with the local community and industry partners to promote knowledge exchange and collaboration.
- Participate in outreach programs, public lectures, and community service.
- Stay current with advancements in pedagogy, technology, and teaching methods.
- Attend conferences, workshops, and seminars to network and share knowledge.
- Pursue opportunities for continuous learning and skill development.

Writing and Publishing

- Write textbooks, academic papers, and scholarly books.
- Contribute chapters to edited volumes and encyclopedias.
- Review and edit manuscripts for journals and academic publications.

Mentoring and Advising

- Mentor junior faculty members and researchers.
- Provide guidance and support to graduate students and postdoctoral researchers.
- Assist students in their career development, including job searches and applications.

Institutional Service

- Participate in accreditation processes and quality assurance activities.
- Engage in administrative duties, such as serving as department chairs or program coordinators.
- Contribute to the university's strategic planning and institutional goals.

Professional Ethics and Integrity

- Adhere to ethical standards in research and teaching.
- Promote academic integrity among students.
- Uphold university policies and standards of conduct.

[22/06/2020 – 15/09/2022]

Associate Professor

The Islamia University of Bahawalpur <https://www.iub.edu.pk/department-of-pathology-faculty-of-veterinary-animal-sciences-iub>

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Teaching and Instruction:

- Developed and delivered undergraduate and/or graduate-level courses.
- Created syllabi, course materials, and assessment methods.
- Provided guidance and mentorship to students, including advising and supervising research projects or theses.
- Stayed current with educational trends and continuously improved teaching methods.

Research and Scholarship:

- Conducted original research in the field of pathology and microbiology.
- Published research findings in peer-reviewed journals, books, and conference proceedings.

- Sought external funding through grants and research proposals.
- Collaborated with colleagues, both within the university and at other institutions, on research projects.

Service and Administration:

- Served on departmental committees, such as curriculum development or faculty hiring committees.
- Participated in university governance through involvement in faculty councils or committees.
- Mentored junior faculty and assisted in their professional development.
- Engaged in community outreach and university-related service activities.

Professional Development:

- Stayed up-to-date with advancements in their field through continued research, attending conferences, and networking with peers.
- Pursued opportunities for professional growth, such as obtaining additional certifications or taking on leadership roles in academic associations.

Advising and Supervision:

- Advised and mentored undergraduate and graduate students, including helping them with academic and career planning.
- Supervised graduate student research, theses, and dissertations.
- Served as thesis or dissertation committee members for graduate students.

Interdisciplinary Collaboration:

- Collaborated with faculty members from other departments or disciplines on interdisciplinary research projects and initiatives.
- Promoted interdisciplinary approaches to teaching and research.

Contribution to Institutional Goals:

- Contributed to the overall mission and strategic goals of the university.
- Supported diversity, equity, and inclusion efforts within the institution.
- Fostered a positive learning and research environment.

Professional Ethics:

- Upheld high ethical standards in teaching, research, and professional conduct.
- Followed university policies and procedures regarding academic integrity, research ethics, and other relevant guidelines.

Continuous Evaluation and Improvement:

- Engaged in periodic performance evaluations and assessments as per university policies.
- Sought feedback from students, peers, and supervisors to improve teaching and research.

[23/04/2012 – 21/06/2020]

Assistant Professor

The Islamia University of Bahawalpur <https://www.iub.edu.pk/departments-of-pathology-faculty-of-veterinary-animal-sciences-iub>

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1. Teaching:

- **Course Instruction:** Developed and delivered course lectures, assignments, and assessments.
- **Curriculum Development:** Contributed to the development and revision of course materials and curricula.
- **Advising:** Provided academic advising and mentorship to undergraduate and graduate students.
- **Supervision:** Supervised undergraduate and graduate student research projects and theses.

2. Research:

- **Research Projects:** Conducted original research in the field of pathology and microbiology, often leading to publications in academic journals.

- **Grant Writing:** Sought and secured research grants and funding from various sources to support research activities.
 - **Conference Presentations:** Presented research findings at academic conferences and seminars.
 - **Collaboration:** Collaborated with other researchers, both within and outside the university.
3. **Service:**
- **Departmental Committees:** Served on departmental committees and participated in decision-making processes within the department.
 - **University Committees:** Contributed to university-wide committees and initiatives, such as accreditation or policy development.
 - **Peer Review:** Engaged in peer review processes for academic journals, conferences, and research proposals.
 - **Community Outreach:** Engaged in community outreach and public engagement related to my area of expertise.
4. **Professional Development:**
- **Continuous Learning:** Stayed current with developments in my field through reading, attending conferences, and networking.
 - **Mentoring:** Sought out mentorship from senior faculty and provided mentorship to junior faculty and students.
 - **Publishing:** Published research in reputable academic journals and worked towards achieving tenure (if applicable).
5. **Student Engagement:**
- **Accessibility:** Were accessible to students during office hours and via email for academic support and guidance.
 - **Feedback:** Provided constructive feedback on student assignments and assessments.
 - **Student Development:** Fostered a positive and inclusive learning environment that encouraged student growth and critical thinking.
6. **Administrative Duties:**
- **Grading:** Graded assignments, exams, and assessments in a timely manner.
 - **Record Keeping:** Maintained accurate records of student performance and academic activities.
 - **Course Planning:** Developed syllabi, course schedules, and educational materials.
7. **Professional Ethics:**
- **Ethical Conduct:** Adhered to ethical standards in research, teaching, and interactions with students and colleagues.
 - **Fair Assessment:** Ensured fair and unbiased assessment of students' work and maintained academic integrity.
8. **Advisory Roles:**
- **Thesis/Dissertation Supervision:** Supervised graduate students in their thesis or dissertation work.
 - **Career Advising:** Provided guidance to students on academic and career choices within the field.

[16/06/2010 – 30/11/2011] **Research Associate**

Department of Pathology, University of Agriculture Faisalabad http://www.uaf.edu.pk/faculties/veterinary/depts/veterinary_pathology/vpa_overview.html

City: Faisalabad | **Country:** Pakistan | **Name of unit or department:** Department of Pathology, University of Agriculture Faisalabad | **Business or sector:** Agriculture, forestry and fishing

1. **Collaborated on Experimental Design:** Collaborated with senior researchers to design experiments, surveys, or studies to address research questions or hypotheses.
2. **Collected Data:** Collected data through various methods such as experiments, surveys, interviews, observations, or archival research.
3. **Analyzed Data:** Analyzed collected data using statistical software or other relevant tools, including both quantitative and qualitative data analysis.

4. **Prepared Research Reports:** Prepared research reports, manuscripts, or presentations summarizing findings and methodologies, often intended for publication or presentation at conferences.
5. **Collaborated with Peers:** Collaborated with other researchers, faculty members, or research teams to achieve project goals and objectives.
6. **Assisted in Grant Proposal Writing:** Assisted in writing grant proposals to secure funding for research projects, including conducting background research and contributing to the proposal's scientific rationale.
7. **Conducted Laboratory Work:** Conducted laboratory experiments, maintained equipment, and ensured safety protocols were followed, where applicable.
8. **Managed Projects:** Managed and organized research projects, including setting timelines, coordinating team members, and tracking progress.
9. **Managed Data:** Organized and maintained research data, ensuring data integrity, security, and accessibility.
10. **Presented Findings:** Presented research findings at meetings, conferences, and seminars to share knowledge with the academic and scientific community.
11. **Engaged in Professional Development:** Stayed updated with the latest developments in the field by reading relevant research articles and attending conferences and workshops.
12. **Mentored Students:** Mentored undergraduate or graduate students, sharing expertise and guiding their research, as appropriate to the role.
13. **Maintained Technical Skills:** Developed and maintained technical skills necessary for the research, including proficiency in laboratory techniques, data analysis software, and specialized equipment.
14. **Solved Problems:** Identified and addressed challenges and obstacles that arose during the research process, finding creative solutions to research-related problems.
15. **Contributed to Publications:** Collaborated with senior researchers to draft and submit research articles to peer-reviewed journals.

[25/03/2008 – 24/03/2010]

Research Associate

Department of Pathology, University of Agriculture Faisalabad http://www.uaf.edu.pk/faculties/veterinary/depts/veterinary_pathology/vpa_overview.html

City: Faisalabad | **Country:** Pakistan | **Name of unit or department:** Department of Pathology, University of Agriculture Faisalabad | **Business or sector:** Agriculture, forestry and fishing

1. **Conducted Research:**
 - Planned and executed research projects in collaboration with faculty members or principal investigators.
 - Collected, analyzed, and interpreted data using various research methods and techniques.
 - Stayed current with relevant literature and contributed to the development of research hypotheses and methodologies.
2. **Conducted Literature Reviews:**
 - Reviewed and summarized existing literature related to the research project.
 - Identified gaps in current knowledge and contributed to the development of research questions.
3. **Performed Data Collection and Analysis:**
 - Designed experiments, surveys, or data collection protocols.
 - Gathered and processed data, ensuring accuracy and adherence to research protocols.
 - Performed statistical analysis and interpreted results using relevant software tools.
4. **Handled Publication and Presentation:**
 - Prepared research findings for publication in academic journals or conferences.
 - Presented research findings at conferences, seminars, and other academic forums.
 - Collaborated with faculty to write grant proposals for research funding.
5. **Managed Projects:**
 - Managed project timelines, budgets, and resources effectively.

- Coordinated research activities among team members and collaborators.
 - Ensured compliance with ethical and regulatory guidelines in research.
- 6. Provided Mentoring and Training:**
 - Provided guidance and mentorship to graduate and undergraduate students involved in research projects.
 - Assisted in supervising the work of research assistants and junior researchers.
 - 7. Managed Data and Documentation:**
 - Organized and maintained research data and documentation in accordance with best practices.
 - Ensured data security and privacy as required by university policies and regulations.
 - 8. Collaborated and Networked:**
 - Collaborated with colleagues within the university and external partners in academia, industry, or government agencies.
 - Attended departmental meetings, research seminars, and conferences to foster collaboration and stay updated on developments in the field.
 - 9. Wrote Grant and Proposal Documents:**
 - Assisted in writing grant proposals to secure funding for research projects.
 - Contributed to the development of research proposals, budgets, and project plans.
 - 10. Engaged in Teaching and Outreach:**
 - Occasionally, Research Associates were involved in teaching or delivering workshops related to their expertise.
 - Engaged in outreach activities to promote research findings to the broader community.
 - 11. Handled Administrative Tasks:**
 - Handled administrative duties related to research, such as managing project documentation, ordering supplies, and maintaining equipment.
 - 12. Ensured Compliance and Ethics:**
 - Ensured that research activities complied with ethical guidelines, safety regulations, and university policies.

[28/01/2006 – 30/06/2007] **Veterinary officer**

Livestock and dairy Department, 133/9L, Sahiwal <https://livestock.punjab.gov.pk/>

City: Sahiwal | **Country:** Pakistan | **Name of unit or department:** Livestock and dairy Department | **Business or sector:** Agriculture, forestry and fishing

- 1. Animal Health and Welfare:**
 - Conducted routine health check-ups and examinations on animals.
 - Diagnosed and treated illnesses and injuries in animals.
 - Administered vaccinations and preventive medications to prevent the spread of diseases.
 - Promoted and ensured the overall welfare of animals in their care.
- 2. Surgical Procedures:**
 - Performed surgeries and surgical procedures on animals when necessary, including spaying and neutering, tumor removal, and dental work.
- 3. Disease Control and Prevention:**
 - Monitored and controlled the outbreak of animal diseases, such as rabies, avian influenza, or foot-and-mouth disease.
 - Implemented quarantine and isolation measures when necessary.
 - Provided expertise in disease prevention and biosecurity measures for farms and animal facilities.
- 4. Food Safety and Inspection:**
 - Inspected food-producing animals to ensure their health and safety for consumption.
 - Oversaw food processing and production facilities to maintain hygiene and quality standards.
 - Conducted inspections and enforced regulations related to food safety.
- 5. Research and Diagnostics:**
 - Conducted research to improve animal health, nutrition, and disease control.

- Used diagnostic tools and laboratory tests to identify and monitor diseases in animals.
 - Contributed to the development of new veterinary treatments and medications.
- 6. Public Health:**
 - Monitored zoonotic diseases (diseases that can be transmitted from animals to humans) and implemented measures to prevent their spread.
 - Educated the public on the safe handling of animals and potential health risks associated with them.
 - 7. Regulatory Compliance:**
 - Ensured compliance with local, state, and national regulations related to animal health and welfare.
 - Investigated and reported cases of animal abuse or neglect.
 - 8. Emergency Response:**
 - Provided expertise and support during natural disasters, disease outbreaks, and other emergencies involving animals.
 - 9. Teaching and Education:**
 - Educated animal owners, farmers, and the public about proper animal care, nutrition, and disease prevention.
 - Taught veterinary students and supervised their clinical training.
 - 10. Administrative Duties:**
 - Maintained detailed records of animal treatments, vaccinations, and surgeries.
 - Managed budgets and resources for veterinary services.
 - Collaborated with other veterinary professionals and support staff.
 - 11. Continuing Education:**
 - Stayed up-to-date with advancements in veterinary medicine through continuing education and training.

EDUCATION AND TRAINING

[01/01/1994 – 18/06/1996]

Matriculation

Lodhran High School, Chak Himta

City: Lodhran | **Country:** Pakistan | **Field(s) of study:** Natural sciences, mathematics and statistics | **Final grade:** A

[25/01/1998 – 25/10/2000]

Intermediate

S.E. College, Bahawalpur <http://gsec.edu.pk/>

City: Bahawalpure | **Country:** Pakistan | **Field(s) of study:** Pre-medical | **Final grade:** A

[01/11/2000 – 30/09/2004]

Doctor of Veterinary and Animal Sciences (D.V.M)

University of Agriculture, Faisalabad <http://web.uaf.edu.pk/>

City: Faisalabad | **Country:** Pakistan | **Field(s) of study:** Agriculture, forestry, fisheries and veterinary: • *Veterinary* | **Final grade:** A | **Thesis:** Study on Microbial Growth and pathogenesis

Main Subjects: Animal Anatomy and Physiology, Clinical Medicine, Pharmacology, Pathology, Animal Nutrition, Surgery, Radiology and Diagnostic Imaging, Animal Behavior and Welfare, Epidemiology, Public Health, Communication Skills, Ethical and Legal Considerations

Skills Obtained: During my Doctor of Veterinary Medicine (DVM) studies, I acquired a diverse and comprehensive set of skills that have not only enriched my knowledge but have also prepared me for a fulfilling career in animal healthcare. These skills include proficiency in clinical diagnosis and treatment, surgical expertise, a deep understanding of pharmacology, preventive medicine practices, and the ability to assess and enhance animal welfare. Additionally, I honed my communication skills to effectively interact with pet owners, educating them about their animals' health and treatment options. My DVM program also instilled in me the importance of ethical and legal compliance in veterinary

practice. With these skills, I am well-prepared to make a meaningful impact on the health and well-being of animals, and to contribute to public health and the broader field of veterinary medicine.

[15/10/2004 – 15/09/2006]

M.Sc. (Hons.)

University of Agriculture, Faisalabad <http://web.uaf.edu.pk/>

City: Faisalabad | **Country:** Pakistan | **Field(s) of study:** Agriculture, forestry, fisheries and veterinary | **Final grade:** A | **Thesis:** Evaluation of Genotoxic and Pathological effects of Oral Administration of Atrazine in male Japanese Quail

Short Description

This research carries substantial significance across multiple domains, encompassing environmental protection, human health, wildlife conservation, and policy formulation. By undertaking a comprehensive investigation into the genotoxic and pathological consequences of administering Atrazine orally to male Japanese Quail (*Coturnix japonica*), this study offers critical insights that have far-reaching implications. It serves as a vital component of environmental stewardship by elucidating the potential risks associated with Atrazine, a commonly employed herbicide in agriculture. Specifically, the inquiry centers on elucidating whether Atrazine exposure precipitates genotoxic effects, thereby causing genetic damage, as well as inducing pathological effects leading to adverse health conditions in the avian subjects. The findings of this research have the potential to inform and influence decision-making processes related to herbicide use and regulation. Furthermore, it contributes to the burgeoning body of knowledge concerning the safety of Atrazine in the context of avian populations, shedding light on its ramifications for reproductive health and overall well-being, thereby bridging critical gaps in our understanding of the environmental impacts of herbicide exposure.

[09/11/2006 – 30/12/2011]

Ph.D.

University of Agriculture, Faisalabad <http://web.uaf.edu.pk/>

City: Faisalabad | **Country:** Pakistan | **Field(s) of study:** Agriculture, forestry, fisheries and veterinary | **Final grade:** A | **Thesis:** Histo-Morphometry, Epidemiology and Molecular Pathobiology of Mastitis in Buffaloes and Cows

Short Description

This comprehensive thesis explores the multifaceted issue of mastitis, a pervasive and economically devastating ailment afflicting both buffaloes and cows within the dairy industry. Mastitis, characterized by the inflammation of the mammary gland, not only leads to reduced milk production but also poses significant health risks to the animals. This research takes a holistic approach, combining histo-morphometric analysis, epidemiological investigations, and molecular pathobiology, to unravel the intricacies of mastitis in these two pivotal dairy species. The importance of this study is underscored by the immense economic repercussions of mastitis in the livestock sector. Reduced milk yields, veterinary expenses, and potential culling of infected animals significantly impact farmers' livelihoods and the overall dairy supply chain. By examining the histo-morphometric changes at the tissue level, this research seeks to provide a deeper understanding of how mastitis affects the mammary gland's structure and function. In addition to histo-morphometry, the epidemiological component of this thesis delves into the prevalence and distribution of mastitis cases, shedding light on the environmental and management factors that contribute to its occurrence. This knowledge is pivotal for designing targeted prevention and control strategies. Furthermore, the molecular pathobiology segment seeks to uncover the underlying genetic and molecular mechanisms driving mastitis in buffaloes and cows. By identifying key molecular pathways and genetic markers associated with mastitis susceptibility or resistance, this research can inform breeding programs aimed at developing more resilient dairy animals. The significance of this research extends beyond scientific curiosity. It carries practical implications that can positively impact the dairy industry by reducing mastitis incidence, improving animal welfare, and enhancing milk production efficiency. Ultimately, the findings of this thesis have the potential to benefit not only farmers and veterinarians but also consumers who rely on a consistent and safe dairy supply for their nutritional needs. By addressing the intricate challenges of mastitis in both buffaloes and cows, this research contributes to the sustainability and productivity of the global dairy sector.

- [2009] [**An outbreak of enterotoxaemia at livestock farm during subtropical summer**](#)
Reference: M. Tariq Javed, Muhammad Irfan, Nasir Mukhtar, Sajjad-ur-Rahman, Riaz Hussain
Acta Tropica 112 (2009) 225–227.
- [2011] [**Pathological and genotoxic effects of atrazine in male Japanese quail \(*Coturnix japonica*\)**](#)
Reference: Riaz Hussain, Fazal Mahmood, Muhammad Zargham Khan, Ahrar Khan and Faqir Muhammad
Ecotoxicology 20 (1):1–8
- [2012] [**Contagious caprine pleuropneumonia in Beetal goats**](#)
Reference: Riaz Hussain, Muhammad Auon, Ahrar Khan, Muhammad Zargham Khan, Fazal Mahmood and Sajjad Ur-Rehman
Trop Anim Health Prod (2012) 44:477–481
- [2012] [**Mastitis and Associated Histo-pathological Consequences in the Context of Udder Morphology**](#)
Reference: Riaz Hussain, M. Tariq Javed, Ahrar Khan, Fazal Mahmood and Razia Kausar
Int. J. Agric. Biol., 14: 947–952.
- [2012] [**Pathological and molecular based study of naturally occurring lentivirus infection**](#)
Reference: Mahmood F, A Khan, MZ Khan, R Hussain, ST Gul and AB Siddique
Pak Vet J, 32(4): 511-514.
- [2009] **Mastitis in Buffaloes: Pathogens, Teat Measurements and Lesions in Natural Cases**
Reference: Riaz Hussain, M. Tariq Javed, Ahrar Khan and Muhammad Nisar Khan
Pakistan J. Zool. Suppl. Ser., No.9, pp. 855-859.
- [2012] [**Changes in some biochemical parameters and somatic cell counts in the milk of buffalo and cattle suffering from mastitis**](#)
Reference: Hussain R, MT Javed and A Khan
Pak Vet J, 32(3): 418-421.
- [2012] [**Cellular and biochemical effects induced by atrazine on blood of male Japanese quail \(*Coturnix japonica*\)**](#)
Reference: Riaz Hussain, Fazal Mahmood, Ahrar Khan, Muhammad Tariq Javed, Sarmad Rehan and Toufeer Mehdi
Pesticide Biochemistry and Physiology 103 (2012) 38–42
- [2012] [**Effects of feeding urea and copper sulphate in different combinations on live body weight, carcass weight, percent weight to body weight of different organs and histopathological tissue changes in broilers.**](#)
Reference: M. Nadeem Shahzad, M. Tariq Javed, Salaman Shabir, M. Irfan and Riaz Hussain
Experimental and Toxicologic Pathology 64 (2012) 141– 147.

- [2012] [Possible risk factors associated with mastitis in indigenous cattle in Punjab, Pakistan](#)
- Reference:** Hussain R, A. Khan, MT Javed and F. Rizvi
Pakistan. Pak Vet J, 32(4): 605-608.
- [2013] [Effects of urea and copper sulphate on some biochemical and meat parameters in broiler chicken](#)
- Reference:** Rasool A, MT Javed, M Akhtar, SS Bhatti, MN Shahzad and R Hussain
Pak Vet J, 33(1): 27-31.
- [2013] [Serum mineral profile in various reproductive phases of mares](#)
- Reference:** Ali F, LA Lodhi, ZI Qureshi, I Ahmad and R Hussain
Pak Vet J, 33(3): 296-299.
- [2013] [Pathological and some serum biochemical effects induced by malathion in japanese quail](#)
- Reference:** R. Hussain, A. Khan and F. Mahmood
The Journal of Animal & Plant Sciences, 23(6): 1501-1506.
- [2013] [Effect of oral application of xylanase on some hematological and serum biochemical parameters in broilers](#)
- Reference:** Ahmad Z, MS Butt, R Hussain, A Ahmed and M Riaz
Pak Vet J, 33(3): 388-390.
- [2013] [Morphometric and pathological studies on mammary gland of slaughtered nili-ravi buffaloes](#)
- Reference:** Riaz Hussain, Ahrar Khan, M. Tariq Javed and Farah Ali
Pak. J. Agri. Sci., Vol. 50(1), 123-130
- [2013] [Risks factors associated with subclinical mastitis in water buffaloes in Pakistan](#)
- Reference:** Riaz Hussain, Muhammad Tariq Javed, Ahrar Khan and Ghulam Muhammad
Trop Anim Health Prod (2013) 45:1723–1729
- [2013] [Molecular analysis of virulent genes \(coa and spa\) of staphylococcus aureus involved in natural cases of bovine mastitis](#)
- Reference:** Ahrar Khan, Riaz Hussain, Muhammad Tariq Javed¹ and Fazal Mahmood
Pakistan Journal of Agricultural Research
- [2014] [Testicular and genotoxic effects induced by subchronic oral administration of chlorpyrifos in japanese quail \(coturnix japonica\)](#)
- Reference:** Muhammad Auon, Fazal Mahmood, Ahrar Khan and Riaz Hussain
Pak. J. Agri. Sci., 51(4), 1005-1010
- [2014] [Clinico-hematological and tissue changes induced by butachlor in male Japanese quail \(Coturnix japonica\)](#)
- Reference:** Riaz Hussain, Ahrar Khan, Fazal Mahmood Sarmad Rehan and Farah Ali
Pesticide Biochemistry and Physiology 109 (2014) 58–63.

- [2014] [**Oxidative status and some serum macro minerals during estrus, anestrus and repeat breeding in Cholistani cattle**](#)
Reference: Farah Ali, Laeeq Akbar Lodhi, Riaz Hussain and Muhammad Sufyan
Pak Vet J, 34(4): 532-534.
- [2014] [**Prevalence and Pathology of dictyocaulus viviparous infection in cattle and buffaloes**](#)
Reference: Mahmood F., A. Khan, R. Hussain and M. S. Anjum
The Journal of Animal & Plant Sciences, 24(3): 743-748.
- [2014] [**Molecular Based Epidemiology of Bovine Pulmonary Tuberculosis – a Mortal Foe**](#)
Reference: Mahmood F, A Khan, R Hussain and IA Khan
Pak Vet J, 34(2): 185-188.
- [2014] [**Clinico-Hematological Disparities Induced by Triazophos \(Organophosphate\) in Japanese quail**](#)
Reference: Ghaffar A, S Ashraf, R Hussain, T Hussain, M Shafique, S Noreen and S Aslam
Pak Vet J, 34(2): 257-259.
- [2014] [**Pathological and molecular based study of pneumonic pasteurellosis in cattle and buffalo**](#)
Reference: Riaz Hussain, Fazal Mahmood, Ahrar Khan, Muhammad Zargham Khan and Abu Baker Siddique
Pak. J. Agri. Sci., 51(1), 235-240; 2014
- [2014] [**Clinico-pathologic findings of enterotoxemia in Chinkara deer \(*Gazella bennettii*\) under desert conditions in Pakistan.**](#)
Reference: Hussain R, Javed MT, F Mahmood, T Hussain,
, 2014. Clinico-pathologic findings of enterotoxemia in Chinkara deer (*Gazella bennettii*) under desert conditions in Pakistan. Pak Vet J, 34(3): 301-304.
- [2014] [**Effects of Maternal Under-nutrition on the Coronary Arterioles in Sheep Fetuses**](#)
Reference: Rehan S, AS Qureshi and R Hussain
Pak Vet J, 34(3): 301-304.
- [2015] [**Genotoxic and pathological effects of malathion in male Japanese quail \(*Coturnix japonica*\)**](#)
Reference: Riaz Hussain, Fazal Mahmood, Ahrar Khan and Farah Ali
Pak. J. Agri. Sci., 52(4), 1143-1149; 2015
- [2015] [**Butachlor induced clinicohematological and cellular changes in fresh water fish *Labeo rohita* \(Rohu\)**](#)
Reference: Ghaffar A, R Hussain, A Khan, RZ Abbas and M Asad
Pak Vet J, 35(2): 201-206.
- [2015] [**Histopathological and serum biochemical changes induced by sub-chronic doses of triazophos in quail**](#)
Reference: Ghaffar A, K Rani, R. Hussain, M Mehreen, T Rubi and S Yasin

- [2015] [Hemato-biochemical and Genetic Damage Caused by Triazophos in Fresh Water Fish, *Labeo rohita*](#)
Reference: Abdul Ghaffar, Riaz Hussain, Ahrar Khan and Rao Zahid Abbas
- [2015] [Clinico-hematological and mutagenic changes induced by arsenic and copper sulphate in adult poultry males](#)
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- [2022] [Heavy metals induced mitochondrial dysfunction in animals: molecular mechanism of toxicity](#)
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- Reference:** Salman, M.; Abbas, R.Z.; Mehmood, K.; Hussain, R.; Shah, S.; Faheem, M,...
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- Reference:** Khan, M.S., Buzdar, S.A., Hussain, R., Afzal, G., Jabeen, G,.....
Oxid. Med. Cell. Longev 2022(1):1-14
- [2022] [Clostridium perfringens Types A and D Involved in Peracute Deaths in Goats Kept in Cholistan Ecosystem During Winter Season.](#)
- Reference:** Hussain R, Guangbin Z, Abbas RZ, Siddique AB, Mohiuddin M, Khan I, Rehman TU and Khan A
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- [2022] [Residue of thiram in food, suppresses immune system stress signals and disturbs sphingolipid metabolism in chickens.](#)
- Reference:** Liu, Y., Yi, J., Li, Y., Hussain, R., Zhu, S., Li, Y., Ouyang, Z., Mehmood, K.,...

- [2022] [Gut-Thyroid axis: How gut microbial dysbiosis associated with euthyroid thyroid cancer](#)
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- [2022] [Clinicohematological, Mutagenic, and Oxidative Stress Induced by Pendimethalin in Freshwater Fish Bighead Carp \(*Hypophthalmichthys nobilis*\)](#)
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- [2022] [Histopathological Investigations and Molecular Confirmation Reveal *Mycobacterium bovis* in One-Horned Rhinoceros \(*Rhinoceros unicornis*\)](#)
Reference: Siddique, A.B., Hussain, R., Jamal, A., Hossain, M., Ahmad, Z., Mansoor, M.K.,
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- [2022] [Acetochlor affects bighead carp \(*Aristichthys nobilis*\) by producing oxidative stress, lowering tissue proteins, and inducing genotoxicity](#)
Reference: Mahmood, Y., Hussain, R., Ghaffar, A., Ali, F., Nawaz, S., Mehmood, K. and Khan, A
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- [2022] [Pathological, Histological, and Molecular Based Investigations Confirm Novel *Mycobacterium bovis* Infection in *Boselaphus tragocamelus*](#)
Reference: Hussain, R., Jamal, A., Ahmed, Z., Mohamed, B.B., Siddique,
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- [2022] [Evaluation of DNA Damage, Biomarkers of Oxidative Stress, and Status of Antioxidant Enzymes in Freshwater Fish \(*Labeo rohita*\) Exposed to Pyriproxyfen](#)
Reference: Li, X., Naseem, S., Hussain, R., Ghaffar, A., Li, K. and Khan, A.
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- [2022] [Pymetrozine Causes Physical, Haematological, Blood Biochemical and Histopathological Abnormalities in Bighead Carp \(*Aristichthys nobilis*\)](#)
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Biomed Res Int. 2022 Jul 18;2022:7140909.
- [2022] [Integrated gut microbiota and metabolomic analysis reveals immunomodulatory effects of Echinacea extract and Astragalus polysaccharides](#)
- Reference:** Li S, Lin R, Chen J, Hussain R, Zhang S, Su Y, Chan Y, Ghaar A and Shi D
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- [2022] [Potential of anisakiasis in foodborne zoonosis](#)
- Reference:** Aguilar-Marcelino L, Bautista-Garfias CR,.....Hussain R.
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- [2022] [ADVANCES IN THE USE OF STEM CELLS THERAPY IN VETERINARY CLINICAL PRACTICE. JAPS](#)
- Reference:** Bhutta, Z. A., Kulyar, M. F. A., Kanwal, A.,.....Hussain, R.
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- [2022] [Nuclear and Morphological Alterations in Erythrocytes, Antioxidant Enzymes, and Genetic Disparities Induced by Brackish Water in Mrigal Carp \(*Cirrhinus mrigala*\).](#)
- Reference:** Raza, G.A., Ghaffar, A., Hussain, R., Jamal, A., Ahmad, Z., Mohamed, B.B. and Aljohani, A.S.,
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- [2022] [Phytochemical Screening, Anti-Inflammatory, and Antidiabetic Activities of Different Extracts from Caralluma edulis Plant.](#)
- Reference:** Khan, M.; Manzoor, Z.;.....Hussain, R.; Hussain, H.I.; Tahir, T.....
Molecules. 2022 Aug 22;27(16):5346.
- [2022] [Lumpy skin disease: A threat to the livestock industry - A review](#)
- Reference:** Khan A, Du XX, Hussain R and Kwon OD
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- [2025] [Preparation and Characterization of Essential oil from Lavandula spica Plant and its Antimicrobial Activity against Pseudomonas aeruginosa and Staphylococcus aureus](#)
- Reference:** Abu Baker Siddique, Riaz Hussain, Hira Ahsan, Maryam Shahid, Muhammad Zishan Ahamd, Bilal Aslam, Farid Shokry Ataya, Institute of MiAbu Baker Siddique, Riaz Hussain, Hira Ahsan, Maryam Shahid,...., Kun Li
Microbial Pathogenesis
- [2025] [Pymetrozine induced remarkable hemato-biochemical modifications and genotoxicity in vital organs of bighead carp \(*Aristichthys nobilis*\)](#)
- Reference:** Munir ahmad, Yasir Mahmooda, Abdul Ghaffar, Riaz Hussain, Shazia Anjum, Dalia Fouade, Farid Shokry Atayaf and Ahrar Khan
Toxicology Mechanisms and methods

Estimation of median LC50 and toxicity of environmentally relevant concentrations of thiram in Labeo rohita

[2025]

Reference: Sana Alam, Gulnaz Afzal, Riaz Hussain, Hafiz Muhammad Ali, Amtul Sami, Rabbiah Manzoor Malik, Raheela Jabeen, Farid Shokry Ataya & Kun Li
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Comparative study of silica and silica-decorated ZnO and Ag nanocomposites for antimicrobial and photocatalytic applications

[2025]

Reference: Arooj Ali, Syed Raza Ali, Riaz Hussain, Rashida Anjum, Qiang Liu, Mohamed S. Elshikh, Noorah Alkubaisi, Rashid Iqbal, Sylwester Tabor & Marek Gancarz
Scientific Reports

NETWORKS AND MEMBERSHIPS

Member Pakistan Society of Pathology

Member Pakistan Veterinary Medical Association

Member Pakistan Poultry Association

CONFERENCES AND SEMINARS

[12/01/2004 – 24/01/2004] **EU Asia Link Project short course on Livestock ecology, sustainable land use and livestock system**

[19/12/2013 – 21/12/2013] **International camel conference, 19-21 2013. The Islamia university of Bahawalpur, Pakistan 63100.**
Bahawalpur, Pakistan

[17/03/2014 – 17/03/2014] **2nd International conference on advancement in research and science. COMSATS institute of information technology 17 March, 2014. Vehari, Pakistan**
Vehari, Pakistan

[22/10/2014 – 24/10/2014] **International Conference On Advances In Parasitology And Public Health (Icapph-2014). College of Veterinary & Animal Sciences, Jhang. October 22-24, 2014. Pakistan.**
Jhang, Pakistan

[03/04/2014 – 04/04/2014] **Two days workshop on poultry diseases diagnosis, 3-4 April 2014. Faculty of veterinary science University of Agriculture Faisalabad, Pakistan**
Faisalabad, Pakistan

[18/08/2014 – 19/08/2014] **2nd International conference on epidemiology and evolutionary Genetics from August 18-19, 2014 at Double tree by Hilton Beijing, China.**
Beijing, China

[28/11/2014 – 30/11/2014] **18th Federation of Asian Veterinary Associations (FAVA) Congress Marina Bay Sands, Singapore, 28 – 30 November 2014 (3 days).**
Singapore

[09/12/2014 – 09/12/2014] **One day workshop on avian respiratory diseases, 09 December, 2014. Faculty of veterinary science University of Agriculture Faisalabad, Pakistan**
Faisalabad, Pakistan

- [04/05/2015 – 15/05/2015] **Completed two weeks training at Department of Pathology Selcuk University, Konya Turkey. May 04-15, 2015.**
Konya, Turkey
- [14/12/2015 – 15/12/2015] **International Seminar on poultry diseases. December 14-15, 2015. Faisalabad, Pakistan.**
Faisalabad, Pakistan.
- [24/10/2016 – 28/10/2016] **Attended Agriculture and Food Risk Assessment Training Program The University of Tennessee, Center for Agriculture and Food Security and Preparedness, USA held it at Bangkok, Thailand 24-28 October, 2016**
Bangkok, Thailand
- [06/09/2016 – 09/09/2016] **Attend the 19th Federation of Asian Veterinary Association Congress (FAVA, 2016) in Ho Chi Minh City, Vietnam, September 6-9, 2016**
Ho Chi Minh City, Vietnam
- [08/08/2016 – 08/08/2016] **National one day Symposium on One- health. August, 08, 2016. UAF, Faisalabad-Pakistan.**
Faisalabad-Pakistan.
- [27/10/2016 – 27/10/2016] **Delivered special lecture as invited speaker on Assessment of DNA damage using Micro-nucleus assay technique on 27 October, 2016 at faculty of Veterinary Science, Department of Pathology Chulalongkorn University, Bangkok, Thailand.**
Bangkok, Thailand.
- [07/01/2017 – 07/01/2017] **One day hands on training workshop “Bio Risk Management in biological Labs” 07 January, 2017, The Islamia University of Bahawalpur**
Bahawalpur, Pakistan
- [02/05/2017 – 04/05/2017] **Attended 1st International conference on climate change and Biodiversity (IC3B-2017) 02-04 May, 2017, The Islamia University of Bahawalpur, Pakistan**
Attended
Bahawalpur, Pakistan
- [02/05/2017 – 02/05/2017] **Attended Advance Isolation and Quarantine Response strategies for a biological outbreak Training Program The University of Tennessee, Centre for Agriculture and Food Security and Preparedness, USA held it at Bangkok, Thailand May, 2017**
Bangkok, Thailand
- [15/11/2017 – 18/11/2017] **Attended International Buffalo Symposium held at Chitwan, Nepal 15-18 November, 2017**
Chitwan, Nepal
- [17/01/2018 – 18/01/2018] **Two days international conference on dairy animal health challenges (DAHC-2018) 17-18, January, 2018. UAF, Faisalabad-Pakistan.**
Faisalabad-Pakistan
- [01/01/2018 – 01/01/2018] **Attended 2nd National one day hands-on training workshop on serum indirect ELISA (Multi-Species) for the diagnosis of Brucellosis held of 1st February, 2018 at college of Veterinary and animal sciences, Jhang Pakistan.**
Jhang, Pakistan.

- [20/04/2018 – 20/04/2018] **Attended one day national training on Histopathology, 20 April, 2018 as Resource person department of Pathology, Faculty of Veterinary sciences University of Agriculture Faisalabad, Pakistan**
Faisalabad, Pakistan
- [24/08/2018 – 25/08/2018] **Attend Wayamba International Conference held on August, 24-25, 2018, Kuliyaipitiya, Sri Lanka. August, 24-25, 2018 (02 Days)**
Kuliyaipitiya, Sri Lanka
- [04/10/2018 – 06/10/2018] **Attended International conference on trans-boundary diseases of veterinary and public health on 4th -6th October, 2018 held at university of veterinary and animal sciences Lahore, Pakistan.**
Lahore, Pakistan.
- [10/10/2018 – 11/10/2018] **Attend 1st International conference on Applied Zoology (ICAZ-2018) October 10-11, 2018 organized by Department of Zoology, Government College University, Faisalabad, Pakistan**
Faisalabad, Pakistan
- [14/12/2018 – 14/12/2018] **Attended one day hands-out training on “Laboratory Biosafety and Biosecurity” Lahore College for Women University, Lahore. 14 December, 2018 (As resource person).**
Lahore, Pakistan
- [13/01/2019 – 13/01/2019] **Attended National One-day hands-on-Training workshop on Lab Biosafety and biosecurity on 13th February 2019 at college of Veterinary and animal sciences, Jhang Pakistan.**
Jhang, Pakistan.
- [14/01/2019 – 14/01/2019] **Attended 4th National one day workshop on developing/updating training modules of DVM internship Program held on February 14, 2019 held at faculty of veterinary sciences, Bahauddin Zakariya University, Multan-Pakistan**
Multan, Pakistan
- [26/02/2019 – 28/02/2019] **Attended International Training Workshop on Basic techniques in Mesenchymal Stem Cell culture and Toxicity Assay. February, 26-28, 2019 held at Department of Anatomy University of Agriculture Faisalabad, Pakistan**
Faisalabad, Pakistan
- [18/02/2019 – 19/02/2019] **Attended International buffalo conference (IBC 2019) held on 18-19 February, 2019 at Pearl continental, Lahore-Pakistan.**
Lahore, Pakistan.
- [26/08/2019 – 26/08/2019] **Attended one day hands-out training on “Laboratory Biosafety and Biosecurity” Lahore College for Women University, Lahore. 26 August, 2019 (As resource person).**
Lahore, Pakistan
- [15/10/2019 – 15/10/2019] **Attended two weeks training At Bali, Indonesia sponsored by The University of Tennessee, Center for Agriculture and Food Security and Preparedness, USA October, 2019**
Bali, Indonesia
- [02/03/2020 – 04/03/2020] **Attended 2nd International workshop on Basic Mechanisms of disease and Poultry Pathology, 2nd -4th March, 2020 held at Department of Pathology-UVAS Lahore.**
Lahore, Pakistan

- [14/12/2020 – 14/12/2020] **Attended “workshop and webinar, on advance molecular techniques An insight view on trouble shooting and primer designing in clinical Diagnosis” 14 December, 2020 CVAS, Jhang (Sub-campus, UVAS), Lahore Pakistan**
Lahore, Pakistan
- [16/11/2021 – 17/12/2021] **Attended International workshop on Biosafety Laboratory Management and Techniques organized by Wuhan Institute of Virology, CAS from December, 16-17, 2021**
Wuhan, China
- [02/06/2022 – 02/06/2022] **Antimicrobial Resistance (AMR), Antimicrobial Use (AMU), Transboundary Animal Diseases (TADs) and Herd Health Management 2nd June 2022**
- [08/02/2022 – 09/02/2022] **Attended 3rd National Training Course on diagnosis of poultry diseases through modern diagnostic techniques February 8 -9TH. Organized by Faculty of Veterinary Sciences, BZ University Multan**
Multan, Pakistan
- [18/11/2022 – 19/11/2022] **The 2022 International Animal Husbandry High-Quality Development Conference," 18-19 November 2022, sponsored by the Shandong Vocational Animal Sciences and Veterinary College, Weifang, China.**
Weifang, China
- [23/11/2022 – 24/11/2022] **Attended International Conference on Fisheries and Aquaculture November 23-24 Department of Zoology, Government College University, Lahore Pakistan.**
Lahore, Pakistan
- [15/12/2022 – 17/12/2022] **1st International Conference on “Innovations in Chemistry, Biochemistry, Biotechnology and Bioinformatics” (ICBBB-2022). Dec 15-17. The Islamia University of Bahawalpur.**
Bahawalpur, Pakistan

PROJECTS

Molecular epidemiology of Sub-clinical mastitis in cholistani cattle at a public farm and different private cattle herds in and around District Bahawalpur (0.499M) AS PI. HEC Funded (Completed)

In-Vivo Safety Evaluation of Synthetic Food Coloring Compounds (0.688M) AS Co-PI. Dr Zulfiqar Ahmad completed. Funded endowment funds UAF (Completed).

HEC funded project: Standardization of Anti-diabetic Medicinal Plants of Cholistan Desert (5.6M) AS Co-PI. Research in progress

Evaluation of acute phase proteins and molecular diagnostic approach for the control of Pasteurellosis in dairy herds of Bahawalpur. Completed. HEC Approved 2017. (3.577M) as PI.

Molecular detection of Mycoplasma bovis induced mortality in calves” for funding under its Natural Sciences Linkage Programme (NSLP) with total budget of Rs. 3,206,676/- for a period of two years. Pakistan Science Foundation (PSF) as Co-PI.

HONOURS AND AWARDS

Certificates of distinction in games (Hockey, Athletics and Wrestling)

PAPER PRESENTED AND ABSTRACT PUBLISHED IN NATIONAL AND INTER- NATIONAL CONFER- ENCES

Bacteriological, pathological and histochemical findings in mammary glands of buffaloes. Pine Bay Holiday Resort, Kusadasi / Aydin – Turkey; September 19-23, 2012 (Poster)

Peliosishepatitis (An uncommon lesion) in crossbred cattle suffering with chronic pulmonary tuberculosis. Pine Bay Holiday Resort, Kusadasi / Aydin – Turkey; September 19-23, 2012 (Poster)

An outbreak of enterotoxaemia at two Chinkara Deer (Gazellabennettii) Farms under Desert Conditions in Cholistan, Bahawalpur. Pine Bay Holiday Resort, Kusadasi / Aydin – Turkey; September 19-23, 2012

Prevalence and therapeutic trials on surra (trypanosomiasis) in camel in and around derawar fort area, cholistan. International camel conference, 19-21 December, 2013, The Islamia University of Bhawalpur, Pakistan.

Studies on Mannheimia haemolytica infection in Thalli sheep during subtropical summer in Pakistan. 2nd International Conference on Epidemiology & Evolutionary Genetics, August 18-19, 2014 Double Tree by Hilton Beijing, China.

Studies on Mannheimia haemolytica infection in Thalli sheep during subtropical summer in Pakistan. 2nd International Conference on Epidemiology & Evolutionary Genetics, August 18-19, 2014 Double Tree by Hilton Beijing, China.

Abattoir based study on disease investigation with special reference to tuberculosis and paratuberculosis in cattle and buffaloes. ASR-2014, 17th March CIIT Vehari, 2nd National conference on advancement in science and research, Pakistan.

Molecular analysis of virulent genes (coa and spa) of Staphylococcus aureus involved in natural cases of bovine mastitis, ASR-2014, 17th March CIIT Vehari, 2nd National conference on advancement in science and research, Pakistan

Epidemiological survey of gastrointestinal parasites in Cholistani Cattle. 6th ASEAN Congress of Tropical Medicine Parasitology. ACTMP 214.5-7. March. Intercontinental Kuala Lumpur.

Pathological and Molecular Diagnosis of Caseous lymphadenitis a public health threat in Chinkara Deer (Gazellabennettii), in Pakistan. International conference on advances in parasitology and public health (ICAPPH-2014) Jhang-Pak. October 22-24, 2014

Clinico-hematological and biochemical studies on Naturally Infected Camels with Trypanosomiasis. International conference on advances in parasitology and public health (ICAPPH-2014) Jhang-Pakistan October 22-24, 2014

Clinico-Hematological and Mutagenic Changes induced by Arsenic and Copper Sulphate in Adult Male Birds. International conference on advances in parasitology and public health (ICAPPH-2014) Jhang-Pakistan. October 22-24, 2014

Hemato-biochemical and Mutagenic effects of Triazophos in Fresh water Fish Labeorohita (Rohu) International conference on advances in parasitology and public health (ICAPPH-2014) Jhang-Pakistan. October 22-24, 2014

Prevalence and pathology of bovine coccidiosis in district Faisalabad, Pakistan. International conference on advances in parasitology and public health (ICAPPH-2014) Jhang-Pakistan. October 22-24, 2014

Histopathological and serum biochemical changes by sub-chronic doses of Triazophos in quail. International conference on advances in parasitology and public health (ICAPPH-2014) Jhang-Pakistan. October 22-24, 2014.

Toxicopathological effects of sub lethal doses of thiamethoxam in cockerels. 'International seminar on poultry diseases.' 14-15 Dec, 2015. Department of Pathology, University of Agriculture, Faisalabad, Pakistan. P#100

. Immuno-pathological studies of Newcastle disease in arsenic intoxicated broiler chicks. 'International seminar on poultry diseases.' 14-15 Dec, 2015. Department of pathology, University of Agriculture, Faisalabad, Pakistan. P#107

Protective effect of berberine in dithio-carbamate induced-liver oxidative stress and toxicity in chicken broilers. "International seminar on poultry diseases" 14-15 Dec, 2015. University of Agriculture, Faisalabad, Pakistan.

Bladder blockage and Testicular changes in male ostrich (Struthiocamelus) associated with aspergillosis. Proceedings of the "International seminar on poultry diseases" 14-15 Dec, 2015. University of Agriculture, Faisalabad, Pakistan.

Serum Biochemical and Histopathological Changes Induced By Concurrent Exposure of Arsenic and Copper Sulphate in Adult Male Birds. "International seminar on poultry diseases" 14-15 Dec, 2015. University of Agriculture, Faisalabad, Pakistan.

Effects of Different Levels of and Arsenic on Some Haemato-biochemical and Histopathological Changes in Layers. "International seminar on poultry diseases." 14-15 Dec, 2015. University of Agriculture, Faisalabad, Pakistan. P#127

Hematological and Mutagenic Changes Induced by concurrent Arsenic and Copper Sulphate in Adult Poultry Males."International seminar on poultry diseases."14-15 Dec, 2015.Department of Pathology, University of Agriculture, Faisalabad, Pakistan. P#141

Effect of chicory (*Chicoriumintybus*) leaves extract on growth, nutrient digestibility, hematology and immune response of broilers. 'International seminar on poultry diseases."14-15 Dec, 2015. University of Agriculture, Faisalabad, Pakistan.

Geno-toxic and Pathological Effects of Malathion in Male Japanese quail (*Coturnix japonica*)". 18th Federation of Asian Veterinary Associations (FAVA) Congress Marina Bay Sands, Singapore 28 - 30. November 2014.

Studies on hematological and cellular changes in fresh water fish *Labeo rohita* exposed to different concentration of butachlor. Proceedings of international conference of fisheries and aquaculture 2014. 09th-10th September, 2014.

Milk somatic cell counts and biochemical parameters in *Camelus dromedaries* infected with sub-clinical mastitis. 4th ISOCARD Conference in 8-12 June 2015 at Kazakhstan P#427

Simultaneous....Layer Flocks in Pakistan. Proceedings of the XXII European Symposium on the Quality of Poultry Meat and the XVI European Symposium on the Quality of Eggs and Egg Products Nantes, P#77. France on 10th -13th May, 2015.

Investigation of trypanomosis in camels kept in desert conditions of South Punjab Pakistan. Proceedings of 4th Conference of ISOCARD "Silk Road Camel" June 8-12, Almaty, Kazakhstan (pp. 255).

Anticoccidial Activity of *beta vulgaris* extract against sporulation of coccidian oocysts. Proceedings, First international conference on tropical animal science and production. July 26-29, 2016. Ambassador Hotel Bangkok, Thailand.

Factors influencing the incidence of *Eimeria leuckarti* in horses. Proceedings of The5th International Conference on Sustainable Animal Agriculture for Developing Countries, October 27-30, Pattaya, Thailand (pp. 140).

Factors influencing the incidence of Babesiosis in sheep of district Toba Tek Singh, Pakistan. Proceedings of The 5th International Conference on Sustainable Animal Agriculture for Developing Countries, October 27-30, Pattaya, Thailand (pp. 141).

Hemato-Biochemical Studies on Naturally Infected Camels with Trypanosomiasis. Dubai UAE Jan 30-31, 2015, 13 (01) Part XIX

Analysis of different impacts of fipronil on growth, hemato-biochemistry, protoplasm and reproduction in adult cockerel. The 19th federation of Asian veterinary Associations Congress, September 06-09, 2016.Ho Chi Minh City, Vietnam

Arsenic and copper sulphate in combination causes testicular and serum biochemical changes in cockerel. The 19th federation of Asian veterinary Associations Congress, September 06-09, 2016. Ho Chi Minh City, Vietnam

Clinico-pathological and Bacteriological studies on caseous lymphadenitis in small ruminants in Pakistan. 2nd International Conference on Zoonoses- 2016. 20-21 October, 2016. Faculty of Veterinary Sciences, Bahauddin Zakariya University, Pakistan.

Anticoccidial Activity of beta vulgaris extract against sporulation of coccidian oocysts. Proceedings, First international conference on tropical animal science and production. July 26-29, 2016. Ambassador Hotel Bangkok, Thailand.

Typing of toxigenic isolates of clostridium perfringens by multiplex in sheep and goats. Program and abstract book of the sixth SAADC conference Batu, 16-19 October, 2017 held at Indonesia.

Disposition kinetics of ciprofloxacin after intramuscular administration in lohı sheep. Dairy Science Park, Selçuk Üniversitesi, Konya, Turkey. November 1-5, 2017.

Reversal of toxic effects in Wistar rats caused by tartrazine through oral administration of melon seed. The international conference on food quality, safety and security-2017. 24-25 October, Colombo, Sirilanka.

Clinico-Haematological and oxidative status of Nili Ravi buffaloes Infected with Trypanosomiasis. Proceedings of International buffalo symposium, Chitwan 15-18 November, 2017 Nepal

Pathological investigation of Emergence Foot and Mouth disease in Buffaloes (*Bos indicus* *Bubalus bubalis*) in Southern Areas of Punjab Province Pakistan. Proceedings of International buffalo symposium, Chitwan 15-18 November, 2017 Nepal.

Hematobiochemical Alterations in tuberculin reactor water buffaloes in Pakistan. Proceedings of International buffalo symposium, Chitwan 15-18 November, 2017 Nepal.

Clinico-pathological diagnosis of clostridial myositis in a cattle herd reared in southern Punjab. One health international conference (OHC-2017) November 13-15 CVAS Jhang. PP-60.

Clinico-hematological, serum biochemical and DNA damage determination in sodium arsenate and urea intoxicated commercial layers. One health international conference (OHC-2017) November 13-15 CVAS Jhang. PP-65.

Fipronil brings drastic changes in hemato-biochemical values in fresh water fish (*Labeo rohita*). One health international conference (OHC-2017) November 13-15 CVAS Jhang.

Clinico-pathological and bacteriological studies on caseous lymphadenitis in small ruminants. One health international conference (OHC-2017) November 13-15 CVAS Jhang. PP-66.

Serotyping and pathological investigation of foot and mouth disease in cattle in Southern Punjab. Proceeding of the "International conference on Dairy animal health challenges" January, 17-18, 2018. University of Agriculture, Faisalabad, Pakistan.

Correlation of milk and serum biochemical profiles with subclinical mastitis in Cholistani cattle. Proceeding of the "International conference on Dairy animal health challenges" January, 17-18, 2018. University of Agriculture, Faisalabad, Pakistan

Patho-physiology of clostrial myositis in a cattle herd reared in southern Punjab. Proceeding of the "International conference on Dairy animal health challenges" January, 17-18, 2018. University of Agriculture, Faisalabad, Pakistan.

Investigation of severe respiratory outbreak in camels. Proceeding of the "International conference on Dairy animal health challenges" January, 17-18, 2018. University of Agriculture, Faisalabad, Pakistan.

Hematobiochemical and oxidative stress parameters in trypanosoma infected camels. Proceeding of the "International conference on Dairy animal health challenges" January, 17-18, 2018. University of Agriculture, Faisalabad, Pakistan.

Epidemiological survey of gastrointestinal parasite in cattle and buffaloes kept in southern Punjab. Proceeding of the "International conference on Dairy animal health challenges" January, 17-18, 2018. University of Agriculture, Faisalabad, Pakistan.

Reproductive problems/issues in dairy animals. Proceeding of the "International conference on Dairy animal health challenges" January, 17-18, 2018. Organized by faculty of veterinary Sciences, University of Agriculture, Faisalabad, Pakistan.

Surgical intervention..... goat kid: a case report. Proceeding of the "International conference on Dairy animal health challenges" January, 17-18, 2018. Organized by faculty of veterinary Sciences, University of Agriculture, Faisalabad, Pakistan.

Lymphoid leukosis in Fayoumi birds reared under rural conditions. Abstract book of the "2018 International Poultry Science Summit" Shandong vocational Animal science and veterinary college, Weifang, China. 02-04 November, 2018.

Bladder blockage and testicular changes in male ostrich associated with Aspergillus. Abstract book of the "2018 International Poultry Science Summit" Shandong vocational Animal science and veterinary college, Weifang, China. 02-04 November, 2018

Molecular and histopathological studies on infectious bronchitis virus in naturally infected broiler chickens. "2018 International Poultry Science Summit" Shandong vocational Animal science and Veterinary College, Weifang, China. 02-04 November, 2018.

Exposure to thiamethaxam at low concentrations induces hematological, genotoxic and histopathological changes in common carp. 1st International conference on Applied Zoology (ICAZ-2018) October 10-11, 2018, GC University, Faisalabad, Pakistan.

Investigation of various adverse effects of pesticides in exposed workers. 1st International conference on Applied Zoology (ICAZ-2018) October 10-11, 2018 organized by Department of Zoology, Government College University, Faisalabad, Pakistan.

Studies on Hematological and DNA Fragmentation in Pesticides Exposed Workers. 1st International conference on Applied Zoology (ICAZ-2018) October 10-11, 2018 organized by Department of Zoology, Government College University, Faisalabad, Pakistan.

An update of bovine tuberculosis in dairy animals demands an efficient control program. Proceeding of the "International conference on Dairy animal health challenges" January, 17-18, 2018. University of Agriculture, Faisalabad, Pakistan

Studies on milk somatic cell counts and hemato-Biochemical alterations in Sub-Clinical Mastitic Dromedary. National camel conference -2019. Health, reproduction, production and Products, June 25, 2019. University of Agriculture, Faisalabad, Pakistan

Investigation of gross and histopathological changes in camel calf died of respiratory infection. National camel conference -2019. Health, reproduction, production and Products, June 25, 2019. University of Agriculture, Faisalabad, Pakistan

Blood and milk biochemical correlation of camel infected with subclinical mastitis. National camel conference -2019. Health, reproduction, production and Products, June 25, 2019. Department of Anatomy, University of Agriculture, Faisalabad, Pakistan

Investigation of blood biochemical and serum biochemistry in naturally infected Camels with Trypanosomiasis. Health, reproduction, production and Products, June 25, 2019. Department of Anatomy, University of Agriculture, Faisalabad, Pakistan

Implementation of OIE Recommendations on the Competencies of Graduating Veterinarians Require Collaborative Efforts Among Countries. International Conference on Farriery and Allied Veterinary Sciences December 07, 2020; ICFAVS-19-08, pp-8

Epidemiology and Patho-physiological Studies in Trypanosoma evansi Infected Camels and Buffaloes in Punjab, Pakistan. International Conference on Farriery and Allied Veterinary Sciences December 07, 2020; ICFAVS-19-08, pp-65

Clinico-Hematological, Patho-Anatomical and Molecular Based Investigation of Black Leg Disease in Cholistani Cattle. International Conference on Farriery and Allied Veterinary Sciences December 07, 2020; ICFAVS-19-08, pp-66

Lumpy skin disease: a threat to the livestock industry. "2022 International Animal Husbandry High-quality Development Conference" Organized by Shandong Vocational Animal Sciences and Veterinary College, Weifang, China, November 18-19: p-13

Oxidative stress and toxicity produced by ... ameliorating agents. International Animal Husbandry High-quality Development Conference" Organized by Shandong Vocational Animal Sciences and Veterinary College, Weifang, China, November 18-19: p-20

Evaluation of hematological,...brucellosis in southern Punjab, Pakistan. International Animal Husbandry High-quality Development Conference" Organized by Shandong Vocational Animal Sciences and Veterinary College, Weifang, China, November 18-19: p-23

Rapid and reliable assessment of DNA damage using micronucleus assay and comet assay techniques. International Animal Husbandry High-quality Development Conference" ,China, November 18-19: p-28.

Hemato-biochemical, oxidative stress biomarkers in erythrocyte and histopathological alterations induced by Brackish water in Mrigal carp. International Conference on Fisheries and Aquaculture November 23-24. p-84.

Nuclear and Morphological Alterations in Erythrocytes, Anti-oxidant Enzymes and Genetic Disparities Induced by Brackish water in Mrigal carp (*Cirrhinus mrigala*). International Conference on Fisheries and Aquaculture November 23-24. p-85.

Studies on binding effects of silver nanoparticles in fresh water fish (*Labeo rohita*). International Conference on Fisheries and Aquaculture November 23-24. p-88-89.

Pymetrozine causes physical, blood-biochemical and histopathological abnormalities in Bighead carp (*Aristichthys nobilis*). International Conference on Fisheries and Aquaculture November 23-24. p-98.

Evaluation of DNA damage, biomarkers of oxidative stress and status of antioxidant enzymes in fresh water fish (*Labeo rohita*) expose to Pyriproxyfen. International Conference on Fisheries and Aquaculture November 23-24. p-98-99.

Oxidative stress induced by acetochlor in fish and application of vitamin E and naringenin as ameliorating agents. International Conference on Fisheries and Aquaculture November 23-24. p-99.

Inquisition of adverse impacts of pesticide (Monomehypo) on clinical, hematological, biochemical and histopathology in *Labeo rohita* fish. International Conference on Fisheries and Aquaculture November 23-24. p-100.

In vitro and in vivo efficiency... thyroid carcinoma. In: Proceedings of 1st International Conference on "Innovations in Chemistry, Biochemistry, Biotechnology and Bioinformatics" (ICBBB-2022). Dec 15-17. The Islamia University of Bahawalpur.

Gene silencing efficiency of nanoparticles... applications. In: Proceedings of 1st International Conference on "Innovations in Chemistry, Biochemistry, Biotechnology and Bioinformatics" (ICBBB-2022). Dec 15-17. The Islamia University of Bahawalpur.

Anti-neoplastic papillary thyroid carcinoma. In: Proceedings of 1st International Conference on "Innovations in Chemistry, Biochemistry, Biotechnology and Bioinformatics" (ICBBB-2022). Dec 15-17. The Islamia University of Bahawalpur.

TRAVEL GRANTS

[18/08/2014 – 19/08/2014]

Higher Education Commission of Pakistan granted Rs. 129,912 for oral paper presentation at the 2nd International conference on epidemiology and evolutionary Genetics from August 18-19, 2014 at Double tree by Hilton Beijing, China.

[28/11/2014 – 30/11/2014]

Pakistan Science foundation granted Rs. 100000 for oral paper presentation at 18th Federation of Asian Veterinary Associations (FAVA) Congress Marina Bay Sands, Singapore, 28 – 30 November 2014

[06/09/2016 – 09/09/2016]

Higher Education Commission of Pakistan granted Rs. 208,631 for oral paper presentation at the 19th Federation of Asian Veterinary Association Congress (FAVA, 2016) in Ho Chi Minh City, Vietnam, September 6-9, 2016.

[15/11/2017 – 18/11/2017]

HEC Travel grant (Rs, 122961) to attend International Buffalo Symposium held at Chitwan, Nepal 15-18. November, 2017

[24/08/2018 – 25/08/2018]

HEC Travel grant (Rs, 101664) to attend Wayamba International Conference held on August, 24-25, 2018, Kuliapitiya, Sri Lanka. August, 24-25, 2018

CHAPTERS PUBLISHED IN BOOKS/ MANUAL

1. M Tariq Javed, Narmeen Tariq, Aziz-Ur-Rehman, Riaz Hussain, Muhammad Sohaib Aslam, Gulbeena Saleem and Aisha Khatoon. General Pathology Manual.

2. Hafiz Ishfaq Ahmad, Khalid Mehmood, Hui Zhang, Muhammad Ijaz, Rao Zahid Abbas and Riaz Hussain, 2021. FASCIOSIS: A MAJOR GLOBAL FOODBORNE ZOONOSIS. Veterinary Pathobiology and Public Health SECTION A: PARASITIC DISEASES FASCIOSIS

3. Riaz Hussain, Muhammad Tariq Javed, Mehwish Faheem, ... Khalid Mehmood, 2021. Veterinary Pathobiology and Public Health SECTION B: BACTERIAL DISEASES UDDER PATHOPHYSIOLOGY AND PUBLIC HEALTH.

4. Mehwish Faheem, Maria Latif, Iram Liaqat, Riaz Hussain and Tauseef-ur-Rehman, 2021. AQUATIC FUNGI AND IMPORTANT FUNGAL DISEASES OF FARMED FISH. Veterinary Pathobiology and Public Health SECTION D: FUNGAL INFECTIONS FUNGAL DISEASES OF FISH.

5. Muhammad Farhab, Riaz Hussain, Muhammad Tahir Aleem, Zubair Luqman and Noreen Sarwar, 2021. WILDLIFE DISEASES OF TROPICS AND SUB TROPICS. Veterinary Pathobiology and Public Health SECTION E: MIXED TOPICS WILDLIFE DISEASES

6. Mudassar Mohiuddin, Zahid Iqbal, Muhammad Farooq, Muhammad Khalid Mansoor, Ruqaiya Sawar, Ayesha Mohiud Din, Arooba Sehar, Riaz Hussain 2022. MULTIDRUG RESISTANCE IN CLOSTRIDIA. Unique Scientific Publishers, Faisalabad, Pakistan, Vol. 2, pp: 34-43.

7. Faisal Siddique,....Riaz Hussain, 2022. VETERINARY VACCINES: WHERE ARE THEY NOW? In: Abbas RZ, Khan A, Liu P and Saleemi MK (eds), Animal Health Perspectives, Unique Scientific Publishers, Faisalabad, Pakistan, Vol. 2, pp: 139-147.

COURSES TAUGHT TO UNDERGRADUATES STUDENTS

Doctor of Veterinary Medicine

General Veterinary Pathology, Necropsy Practices, Meat Hygiene and Public Health, Milk Hygiene and Public Health, Poultry Pathology, Animal Physiology, Clinical Pathology, Epidemiology and public Health, Meat and slaughter house by products, Fisheries and Aquaculture, Animal Parasitology, Hematology, Fisheries, Fish and Fisheries of Pakistan, Technical Report Writing, Clinical Pathology, General Microbiology.

COURSES TAUGHT TO POSTGRADUATES STUDENTS

M.Phil

Advanced Poultry Pathology, Advanced General Pathology, Ruminant Pathology, Immuno Pathology, Advanced Clinical Pathology, Endocrinology, Cancer Biology

MEMBER/ CO-SUPER- VISOR IN RESEARCH THESIS OF STUDENTS

Mentorship

1. Toxicological effects of various combinations of arsenic and Copper Sulphate in male birds (Gallus

gallus). Research Thesis completed by Javeria Hanif.

2. Clinico-Hematological effects of different levels of arsenic and urea in fish (Labeo Rohita). M. Phil

Research Thesis completed by Muhammad Aslam.

3. Toxicopathological effects of an organophosphate triazophos in male Japanese quail (Coturnix japonica).

M. Phil Research Thesis completed by Mudassara Mehreen

4. Effects of feedings of different levels of urea and arsenic on some hemato-biochemical and

histopathological parameters in layers RIR Fayoumi cross breed (Gallus domesticus). M. Phil Research Thesis

completed by Yasir Rahim.

5. Clinico-hematological and testicular changes induced by triazophos in male Japanese quail (Coturnix

japonica): Their attenuation with vitamin E. M. Phil Research Thesis completed by Sana Aslam.

6. Effects of orally feedings of different levels of urea and arsenic on feed intake, live body weight, carcass

weight and histopathological in layers (RIR Fayoumi cross breed) Gallus domesticus. M. Phil Research Thesis

completed by Muhammad Nasir Ahmad.

7. Studies on oxidative stress and some histopathological alterations induced by different levels of arsenic

and copper sulphate in male birds (*Gallus gallus*). Research Thesis completed by Hafza Sadia Iqbal.

8. Assessment of toxicological effects of different combinations of arsenic and copper sulphate in different

tissues of male birds (*Gallus gallus*). Research Thesis completed by Amina Sagheer.

9. Studies on some hemato-biochemical changes induced by different combinations of arsenic and copper

sulphate on some serum biochemical profile in male birds. Research Thesis completed by Iqra Rasheed

Chudhry.

10. Mutagenic effects of different combinations of arsenic and copper sulphate in male birds (*Gallus gallus*)

detected by Micronucleus Assay. Research Thesis completed by Muhammad Asad.

11. Clinical and testicular changes induced by arsenic and copper sulphate of male birds (*Gallus gallus*).

Research Thesis completed by Javeria Nawaz.

12. Toxicological effects of triazophos on male Japanese quail (*Coturnix japonica*). Research Thesis completed

by Sehrish Yasin

13. Cellular and serum biochemical changes induced by triazophos in male Japanese quail (*Coturnix*

japonica). M. Phil Research Thesis completed by Kushnoda Rani.

14. Physical and behavioral effects of Fipronil in fish (*Labeo Rohita*). Research Thesis completed by Rahela

Khan.

15. Serum biochemical alterations in fresh water fish (*Labeo Rohita*) Rohu induced by fipronil

(Phenylpyrazole). Research Thesis completed by Hina Altaf

16 Mitigation of Flupyradifurone Induced Histo-pathological and Erythrocytic Damage in *Cirrhinus mrigala* Using Antioxidant Agent. M.Phil thesis research completed by Ruquyya Batool

17 Hemato-biochemical and Histopathological Effects due to Co-exposure to Emamectin Benzoate and Chlorfluazuron in *Labeo rohita* and Ameliorative Effect of Antioxidant Agent M.Phil thesis research completed by Maria Manzoor

3 Investigation of Hematological, Histopathological and msculoskeletal changes by CuFe204 Nano particles in Albino Rats. M.Phil thesis research completed by Zoha Khan

18 Investigation of oxidative stress and Histopathological alterations due to CuFe204 Nanoparticles in Liver and Kidney of Albino Rats. M.Phil thesis research completed by Sidra Murtaza

19 Investigation of Adverse impact of Copper ferrite nonoparticles on lungs and spleen of Albino Rats. M.Phil thesis research completed by Jahanzaib Badar

20 Investigation of Oxidative Stress and Antioxidative enzymes in erythrocytes and bone marrow of Albino rats treated with the different Concentrations of copper ferrite Nano particles M.Phil thesis research completed by Muhammad Asif

21 Variation of Hematological Parameters Induced by Excessive Use of Energy Drinks (Redbull, Powerfull and Sting) in Albino Rats (*Rattus norvegicus*). M.Phil thesis research completed by Aneesa Zafar

Mentorship

1. Morphological changes in erythrocytes induced by fipronil (Phenylpyrazole) of fresh water fish (Labeo

Rohita) Rohu. Research Thesis completed by Saman Ali.

2. Effects of orally administrations of different levels of DAP and arsenic on feed intake, live body weight, carcass weight and histopathological changes in layers (RIR Fayoumi cross breed). M. Phil Research Thesis

completed by Muhammad Saleem.

3. Effects of different levels of DAP and arsenic on some hemato-biochemical and histopathological in

layers (RIR Fayoumi cross breed). M. Phil Research Thesis completed by Rozina Malik.

4. Cytopathogenic and serum biochemical changes induced by different levels of urea and arsenic in

layers (RIR Fayoumi cross breed). M. Phil Research Thesis completed by Tehmina Khan.

5. Studies on hemato-biochemicals changes in trypanosome infected camels. Research Thesis completed

by Sidra Sultan.

6. Clinical and hematological study in trypanosome infected camels. Research Thesis completed by Ayesha

Maqsood.

7. Cardiac and oxidative stress parameters in trypanosome infected camels. Research Thesis completed

by Maria Niaz.

8. Investigations of severe respiratory outbreak in camels. Research Thesis completed by Aminah Bashir.

9. Clinico-hematological and some serum biochemical changes induced by fipronil in common carp

(*Cyprinus carpio*). M.Phil Thesis Research completed by Mujahid Kaleem.

10. Hematological and cellular changes induced by triazophos in male Japanese quail (*Coturnix*

japonica). Their attenuation with vitamin E. Research Thesis completed by Maryam Shafique.

11. Effect of orally feeding of triazophos on feed intake, body weight and histopathological changes in male

Japanese quail (*Coturnix japonica*). Research Thesis completed by Sobia Noreen.

12. Effect of histopathological and hematological changes by orally administration of triazophos in male

Japanese quail (*Coturnix japonica*). Research Thesis completed by Sana Ashraf.

13. Molecular epidemiology, biochemical and antibiogram studies on sub-clinical mastitis in Cholistani cows

in and around district Bahawalpur. PhD Research Thesis completed by Mr. Abdul Qayyum.

14. Development and evaluation of vaccine prepared from Staphylococcus aureus isolates of camel mastitis.

PhD Research Thesis (2017) completed by Mr. Amjad Islam Aqib.

15. Assessment of genotoxic potential in Labeo rohita exposed to different concentrations of Thaimethoxam.

M. Phil Research Thesis (2017) completed by Iqra Rasheed Chaudhry.

16. Inquisition of Hematological, Histopathological and Muscular Alterations Triggered By Silicon Nano Particles in Albino Rats. M.Phil thesis research completed by Aliza Maheen

17. Investigation of Toxic Effects of Silicon Nanoparticle on Brain And Reproductive Organ of Male Albino Rats. M.Phil thesis research completed by Ayesha Ramzan

18. Molecular Based Identification Of Trypanosoma Infection In Camels Reared At Cholistan Desert. M.Phil thesis research completed by Qamar Tofeeq Rao

19. Hematological, Serum Biochemical And Some Risk Factors Associated With Trypanosoma Infection In Camels Reared At Cholistan Desert. M.Phil thesis research completed by Touqeer Abbas

20. Assessment of Oxidative Stress Profile and Hepato-Renal Lesions Due to Silicon Nanoparticles in Albino Rats. M.Phil thesis research completed by Rimsha Ajmal

21. Assessment of Oxidative and Antioxidative Stress Profile in Erythrocytes and Hematopoietic Tissues of Albino Rats Treated With Different Concentration of Silicon Nano Particles. M.Phil thesis research completed by Balqees khadim

22. Determination of Deleterious Impact of Silicon Nanoparticle on Gingiva And Spleen of Albino Rats. M.Phil thesis research completed by Sara Tariq

23. Determination Of Deleterious Impact Of Silicon Nanoparticle On Teeth And Heart Of Albino Rats. M.Phil thesis research completed by Amina Islam

24. Assessment Of Hepato-Renal And Cardiac Biomarkers In Serum Of Albino Rats Exposed To Silicon Nanoparticle. M.Phil thesis research completed by Mubeen Talib

Mentorship

1. Hematological and histopathological in gills of Rohu (Labeo rohita) exposed to Thaimethoxam. M. Phil

Research Thesis (2017) completed by Sobia Noreen

2. Histological alterations in different tissues of Labeo rohita (Rohu) exposed to herbicide Glyphosate.

Research Thesis (2017) BS (Hons) completed by Riaz Ghafoor.

3. Investigation of various adverse effects of pesticides in exposed workers. M. Phil Research Thesis (2017) completed by Muhammad Asad.

4. Some hematobiochemical alterations in Labeo rohita (Rohu) exposed to herbicide Glyphosate. BS

(Hons) Research Thesis (2017) completed by Noman Ahmad.

5. Cellular and nuclear changes induced by different levels of herbicide Glyphosate in Labo rohita (Rohu).

BS (Hons) Research Thesis (2017) completed by M. Waseem Akram.

6. Clostridium Chauvoei associated macroscopic and microscopic changes in cattle. BS (Hons) Research Thesis (2017) completed by Ghulam Dastgir.
7. Cellular and nuclear changes induced by different concentrations of imidacloprid in Hypothalthis molitrix (silver carp). BS (Hons) Research Thesis (2017) completed by Hasrat Moeen.
8. Some hematobiochemical alterations in silver carp (Hypothalthis molitrix) exposed to insecticide Imidocloprid. BS (Hons) Research Thesis (2017) completed by Muhammad Asad.
9. Investigation of different adverse effects of imidacloprid in some organs of silver carp (Hypothalthis molitrix). BS (Hons) Research Thesis (2017) completed by Umaira Iqbal.
10. Clinico-epidemiology of Staphylococcus aureus subclinical mastitis in camels from two distinct ecological zones. Ph.D Research Thesis (2018) completed by Mr. Mahboob Ali.
11. Efficacy of trisodium citrate, zinc and acidified copper sulphate for the treatment of Staphylococcus aureus subclinical mastitis in lactating cattle. M. Phil Research Thesis (2018) completed by Mr. Mohammad Mohsin Ali.
12. Studies on hematological and DNA fragmentation damage in pesticide exposed workers. M. Phil Research Thesis (2018) completed by Sidra Baig.
13. Biomarkers of oxidative stress and DNA damage among pesticide retailers in district Khanewal. M. Phil Research Thesis (2019) completed by Maria Niaz.
14. Biomonitoring of blood biochemical and genotoxic potential of pesticides in exposed rural inhabitants. M. Phil Research Thesis (2019) completed by Ayesha Maqsood.
15. Assessment of DNA damage, Oxidative stress and serum mineral profiles in workers exposed to pesticides. M. Phil Research Thesis (2019) completed by Kashifa Akram.
- 16 Correlation Of Oxidative Stress, Antioxidant Enzymes And Some Blood Parameters In Camels Infected With Trypanosomiasis Reared Under Tropical And Subtropical Conditions. M.Phil thesis research completed by M Mahboob Ahmad sirajvi
- 17 Inquisition of Patho-physiological and Toxicological effects of Thiram in Labeo rohita. Ph.D. thesis research by Sana Alam
- 18 Synthesis and Characterization of Cerium and Graphene Nanoparticles using Taxus Extract and their Biochemical and Environmental Application Ph.D. thesis research by Tuba Tariq
- 19 Nanocomposites and MOFs Synthesis from Foeniculum vulgare: Characterization, Biomedical and Photocatalytic Applications. Ph.D. thesis research by Sana Batool
- 20 Inquisition of virulence genes of Escherichia coli and histopathological alterations in naturally infected broiler chickens M.Phil thesis research completed by Muhammad Jamshaid Iqbal
- 21 Occurrence, antibiogram and histopathological studies of Escherichia coli isolated from broiler chicks in and around Bahawalpur M.Phil thesis research completed by Muhammad Tahir Riaz

Mentorship

1. Evaluation of genotoxicity in water and fish collected from river Tawi, Pakistan. M. Phil Research Thesis (2019) completed by Ms. Iqra Talib.
2. Assessment of genotoxic potential of River Chenab. M. Phil Research Thesis (2019) completed by Ms. Zainab Batool.
3. Investigation of gross and histopathological in respiratory tract of camel calf. BS (Hons) Research Thesis (2019) completed by Ms. Summan Iqbal.
4. Investigation of gross and microscopic lesions of different organs of Rhinoceros. BS (Hons) Research Thesis (2019) completed by Ms. Ifrah Idrees.
5. Studies on pneumonic changes of Nilgai died of respiratory signs. BS (Hons) Research Thesis (2019) completed by Ms. Sabeera Siddiq.
6. Studies on gross and microscopic changes in liver, lungs and intestine of crocodile in case of sudden death. BS (Hons) Research Thesis (2019) completed by Ms. Iqra Khalid.
7. Serum biochemical and histopathological changes induced by low concentration of Pendimethalin in fish bighead carp (*Aristichthys nobilis*). MS (Hons) Research Thesis (2020) completed by Mr Abdul Qadeer Saad.
8. Clinical, hematological and mutagenic effects of Pendimethalin in fish bighead carp (*Aristichthys nobilis*). MS (Hons) Research Thesis (2020) completed by Ms Urooj Nazir.
9. Responses of Pendimethalin induced stress in antioxidant parameters and some histopathological tissues in fish bighead carp (*Aristichthys nobilis*). MS (Hons) Research Thesis (2020) completed by Mr Noman Ahmad.
10. Evaluation of immune-toxicological effects of fipronil at sub-lethal doses in broiler birds. MS (Hons) Research Thesis (2020) completed by Mr Muhammad Zergham Tahir.
11. Occurrence of multidrug resistance pseudomonas aeruginosa from dermal infections in Toba Tek Singh. MS (Hons) Research Thesis (2020) completed by Mr Usman Nazir.
12. Occurrence of multidrug resistant mycobacterium tuberculosis from patients of pulmonary tuberculosis in district Multan. MS (Hons) Research Thesis (2020) completed by Mr Muhammad Ishaq.
13. Studies on growth performance and fatty acid contents of Labeo rohita fed processed fish silage diets. MS Research Thesis (2020) completed by Hajra Ijaz (1825238065).
14. Assessment of cytogenotoxicity in Ctenopharyngodon idella injected with endocrine disruptors. MS Research Thesis (2020) completed by Sidra Arshad (1825238085).
15. Assessment of phthalate toxicity in C. idella under acute exposure conditions. MS Research Thesis completed by Sehrish Bahar (1825238040).

16. Biomimetic synthesis of nanoparticles using medicinal plant (*Euphorbia helioscopia*), their characterization and biological potentials. Ph.D. Research Thesis completed by Muneeza Mustafa
17. Biogenic and Eco-benevolent Synthesis of Nanoparticles, their Characterization and their Biological Applications Ph.D. Research Thesis completed by Saira Rafique
18. Studies on the Subchronic Effects of Aqueous Nickel and Chromium Co-Exposure on Liver and Gills Functions in Tilapia Fish. MS. research thesis completed by Mashal Hameed
19. Investigating the Subchronic Effects of Aqueous Cadmium and Nickel Co-Exposure on Liver and Kidney Functions in Tilapia Fish. MS. research thesis completed by Muhammad Rashid
20. Examining the Subchronic Effects of Aqueous Cadmium and Nickel Co-Exposure on Gills and Cardiac Functions in Tilapia Fish. Ms. research thesis completed by Hirra Gill
21. Determination of the Subchronic Effects of Aqueous Nickel and Chromium Co-Exposure on Kidneys and Heart Functions in Tilapia Fish. MS. research thesis completed by Ayesha Iqbal
22. Thiram induced toxicity in immune organs of the broiler chicken: Ameliorative potential of Betane. MS. research thesis completed by Mehmood Khan
23. Toxicity induced by Thiram in brain, heart and lungs and remedial effects of Betane in broiler chickens. MS. research thesis completed by Baber Hussain
24. Assessment of oxidative stress profile and hepato-renal lesions due to vanadium, magnesium and nickel Nanocomposite in albino rats. MS. research thesis completed by Ayesha Qadri

Mentorship

1. Isolation and antibiotic resistance profile of *Escherichia Coli* in Raw milk. MS Research Thesis (2021)
completed by Muhammad Irfan.
2. Antibacterial Potential of Silver-oxide Nanoparticles against Multidrug-Resistant *Pseudomonas Aeruginos*. MS Research Thesis (2021) completed by Basim Javed.
3. Utilization of *Salsola imbricate* Extract for value addition of food products. MSc Research Thesis (2020)
completed by Adeel Aslam.
4. Nutritional requirement of food items employing *Leptadenia pyrotechnia* Extract. MS Research Thesis
(2020) completed by Furqan Iqbal.
5. Safety evaluation of *Panicum antidotale* isolates for food products development. MS Research thesis
(2020) completed by Ghulaam Yaseen
6. Value addition of food products with *Salvadora oleoies* Isolates. MSc research thesis (2020) completed
by Javeria kanwal
7. Toxicopathological effects of acetachlor in freshwater fish; Amelioration with antioxidant and adsorbing agents PhD Research thesis (2022) completed by Yasir Mehmood

8. Assessments of Toxicopathological effects of pymetrozine in freshwater fish; Amelioration with antioxidants and adsorbing agents. PhD research thesis (2023) completed by Munir Ahmad
9. Toxicopathological effects induced by pyriproxyfen in freshwater fish; Protective effect of Antioxidants and adsorbing agents. PhD research thesis (2023) completed by Sumaira Naseem
10. Inquisition of micronuclei and other nuclear changes in peripheral erythrocytes in Quail induced by Bifenthrin BS Hons thesis research (2021) completed by Amna Mubeen.
11. Studies on gross and microscopic changes in some tissues (Kidney and Heart) of Quails (Coturnix Japonica) exposed to Bifenthrin BS Hons thesis research (2021) completed by Asma Zafar
12. Evaluation of Toxicological impacts of Copper sulphate in freshwater fish (Labeo rohita). MS Research thesis (2021) completed by Shafaq Jahan.
13. Investigation of Hematological, mutagenic and oxidative stress biomarkers due to copper sulphate in freshwater fish. MS research thesis (2021) completed by Momil Liaquat.
14. Inquisition of Growth and Toxicophysiological parameters of carp reared in Brackish water. PhD research thesis complete Ghulam Ali Raza.
15. Assessment of Toxicopathological effects of Azoxystrobin in labeo rohita; Amelioration with antioxidants. PhD thesis research by Syed Athar Hussain Kazmi (Ongoing) (2022)
16. Development of Chitosan Nanoparticle Adjuvanted Recombinant DNA Vaccine for Pasteurella Multocida Associated with Hemorrhagic Septicemia in Bovines. PhD thesis research completed by Fayyaz Ahmed at (FVS) University of Agriculture Faisalabad (2022)
17. Evaluation of different gene expression in Oreochromis Niloticus exposed to industrial effluents. PhD thesis research (Ongoing) by Iqra Muzaffar at Department of Zoology, LCWU Lahore (2022)
18. Biological Evaluation of Silicon based Nanoparticles. PhD thesis research (Completed) by Arooj Ali at Institute of Physics IUB (2022)
19. Determination of deleterious impacts of vanadium, magnesium and nickel Nanocomposite on hematopoietic and intestinal tissues of albino rats. MS. thesis research completed by Tahira Bibi
20. Inquisition of hematological and neuro-muscular alterations triggered by nickel and magnesium Nanocomposite in albino rats. MS. thesis research completed by Fouzia Manzoor
21. Investigation of toxic effects of nickel and magnesium Nanocomposite on erythrocytes and reproductive organ of male albino rats. MS. thesis research completed by Sobia Manzoor

21. Assessment of oxidative stress on heart of albino rats exposed to different concentrations of nickel and magnesium Nanocomposite. MS. thesis research completed by Kishwar Batool
22. Inquisition of toxic effects triggered by sublethal doses of Thiram on gills of fresh water fish. MS. thesis research completed by. Komal Khan
23. Assessment of oxidative stress profile and hepato-renal lesions due to nickel and magnesium Nanocomposite in albino rats. MS. thesis research completed by Sania Ghafoor

Mentorship

1. Toxicity Assessment on Body composition and growth of carp *Labeo rohita* exposed to different concentrations of organophosphate (Pesticide). M.Phil thesis research completed by Alia Faheem
Department of Zoology BZU (2022)
2. Hematological Alteration in *ctenopharyngodon Idella* by effect of pesticide trichlorfon
M.Phil thesis research completed by Tehzib Zahra Department of Zoology BZU (2022)
3. Study on metal toxicity in different body organ of carp *catla catla*. M.Phil thesis research completed by
Younas Kareem Department of Zoology BZU (2022)
4. Qualitative and quantitative determination of p-Phenylene diamine in different hair dyes and its
toxicological studies. M.Phil thesis research completed by Aqdas Zafar Institute of chemistry IUB (2022)
5. Hematobiochemical and reproductive effects induced by Lufenuron in male Japanese quail (*Coturnix japonica*). M.Phil thesis research completed by Amna Jalal, Department of Zoology IUB (2022).
6. Effects of Lufenuron on body weight, organ weight and histopathological changes in male Japanese quail. M.Phil thesis research completed by Zaib Un Nisa, Department of Zoology IUB (2022).
7. Oxidative stress and genotoxic potential of Lufenuron in male Japanese quails (*Coturnix japonica*).
M.Phil thesis research completed by Silwat Saeed, Department of Zoology IUB (2022).
8. Hemato-biochemical and histopathological effects due too exposure to Sodium fluoride in fresh water
fish (*Labeo rohita*). M.Phil thesis research completed by Muhammad Hasnain Mustafa, Department of
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