

## Dr. MUHAMMAD LATIF



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Email: [latifck@yahoo.com](mailto:latifck@yahoo.com) , [muhammad.lateef@ue.edu.pk](mailto:muhammad.lateef@ue.edu.pk)

Phone: +92-305-6987489

Date of Birth: 12 November 1979

CNIC: 36302-5256681-5

Address: Street #17, New Shahdab Colony No. 2, near  
Pull Bararan, Multan, Punjab, Pakistan

### CARRIER OBJECTIVES

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I am keen to embark on a career where I can serve the research group in a challenging and dynamic environment towards a successful career by making the best out of my professional abilities and interpersonal skills. Qualified for a challenging and decision-making assignments. I see myself as an active contributor to a team of dedicated and ambitious people teaching and working on projects that involve blend of Zoology and thereby enhance my knowledge and personality.

### WORK EXPERIENCE

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#### Administrative Experience

- **Coordinator, Department of Zoology**  
University of Education, Multan Campus  
*24 August 2025 – Present*
- **Coordinator, Department of Zoology**  
University of Education, Faisalabad Campus  
*01 February 2018 – 21 February 2021*
- **Hostel Superintendent (Boys Hostel)**  
University of Education, Faisalabad Campus  
*01 October 2017 – 31 October 2018*
- **Estate Officer**  
University of Education, Faisalabad Campus  
*23 January 2017 – 30 September 2017*

- **Security Focal Person**  
University of Education, Multan Campus  
*30 May 2016 – 15 September 2016*

### Academic & Teaching Experience

- **Associate Professor**  
Department of Zoology, University of Education, Lahore (Multan Campus)  
*29 March 2023 – Present*
- **Assistant Professor (Tenure Track System – TTS)**  
Department of Zoology, University of Education, Multan Campus  
*11 September 2017 – 28 March 2023*
- **Assistant Professor (IPFP)**  
Department of Zoology, University of Education, Faisalabad Campus  
*09 May 2016 – 08 September 2017*
- **Part-Time Lecturer**  
Bahauddin Zakariya University, Multan, Pakistan
- **Biology Instructor**  
O-Level and A-Level Biology

## ACADEMIC QUALIFICATIONS

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### PhD in Zoology

- University: Bahauddin Zakariya University, Pakistan
- Major: Fisheries
- Session: 2016
- Thesis: *Biology and Body Composition of Channa marulius (Soul) from Two Natural Habitats of Pakistan*

### M.Phil in Zoology

- University: Bahauddin Zakariya University, Pakistan (Institute of Pure and Applied Biology)
- Major: Molecular Physiology
- Session: 2003–2006
- CGPA: 3.91/4.00
- Thesis: *Study on Glaucoma in Relation to Different Factors and their Associates Among Patients visiting Eye OPD, Nishtar Hospital, Multan, Pakistan*

### Master of Science in Zoology

- University: Bahauddin Zakariya University, Pakistan (Institute of Pure and Applied Biology)
- Major: Zoology
- Session: 2000–2002
- Marks: 689/1200 (59%)

### Bachelor of Science (B.Sc.)

- University: Bahauddin Zakariya University, Pakistan (Govt. College Bosan Road, Multan)

- Major: Chemistry, Botany, Zoology
- Session: 1998–2000
- Marks: 469/800 (59%)

#### **Intermediate (F.Sc. Pre-Medical)**

- Board: BISE Multan (Govt. Science College, Multan)
- Session: 1995–1998
- Marks: 731/1100 (66.5%)

#### **Matriculation (Science)**

- Board: BISE Multan (Govt. Pilot Secondary School, Multan)
- Session: 1993–1995
- Marks: 647/850 (76%)

## **CERTIFICATIONS & HONORS**

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- Awarded **SRGP** worth 0.45 million PKR by **HEC Pakistan**
- Received **Dr. Abdus Salam Gold Medal** from the Zakariya Association of Zoologists in 2016
- Awarded **Indigenous 5000 Scholarship** by **HEC Pakistan**, Batch V for PhD studies in 2010
- **National Cadet Corps (N.C.C.) Certificate**, 1996
- Completed **4-Week Computer Training Programme**

## **SKILLS**

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### **Languages**

- **English** – Fluent
- **Urdu** – Fluent
- **Punjabi** – Fluent
- **Saraiki** – Fluent

### **Technical & Laboratory Skills**

- Whole Exome Sequencing (WES)
- Sanger Sequencing
- Polymerase Chain Reaction (PCR)
- Gel Electrophoresis
- Spectrophotometry
- High-Performance Liquid Chromatography (HPLC)
- Microtomy

### **Computer Expertise / Software**

- MS Office
- Minitab
- Statistix
- EndNote

## HOBBIES & PERSONAL INTERESTS

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- Nature exploration and environmental appreciation
- Reading scientific and general-interest books
- Designing and planning new scientific experiments
- Exploring new software and emerging technologies
- Continuous improvement of experimental, communication, and intellectual skills
- Internet-based research and academic resource exploration

## CONFERENCES/TRAININGS WORKSHOPS/SEMINARS

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### Seminars Organized

- **"Zoology as a Business: Exploring Entrepreneurship and Career Opportunities in Biological Sciences"** – University of Education, Multan Campus, 11-Dec-2025
- **"Digital Biology: When Experiments Happen Inside Computer"** – University of Education, Multan Campus, 25-Nov-2025
- **"Bioinformatics Approaches for SNPs Analysis in Molecular Biology"** – University of Education, Multan Campus, 15-Oct-2025
- **"Mental Health and Psychosocial Support"** – University of Education, Multan Campus, 14-Oct-2024
- **"Healthy Diet"** – University of Education, Multan Campus, 29-Sep-2022
- **"Silent Killers: Manage Well, Live Well"** – University of Education, Multan Campus, 09-Feb-2022
- **"Genetic Insights of Human Dwarfism"** – University of Education, Multan Campus, 16-Dec-2021
- **"Pulmonary Disease"** – University of Education, Multan Campus, 2020
- **"Tailoring of Nanostructure with Unique Surface Chemistry and Its Application"** – University of Education, Multan Campus, 2020
- **"Role of Creatine Monohydrate Supplementation in Stroke"** – University of Education, Multan Campus, 2020
- **"Hepatitis"** – University of Education, Faisalabad Campus, 2019
- **"International Symposium on Wildlife"** – University of Education, Faisalabad Campus, March 2019
- **"Microalgae"** – University of Education, Faisalabad Campus, 2018

### Guest Speaker / Invited Talks & Conference Presentations

- **Guest Speaker** – *One-Day Seminar on Exploring the Clues of Fish Skin Mucus Against Pathogenic Microbes*  
Department of Zoology, CIBS, Cholistan University of Veterinary & Animal Sciences, Bahawalpur, Pakistan — **05 December 2025**

- **Keynote Speaker** – *1st International Conference on Biodiversity, Sustainability and Natural History*  
Emerson University, Multan — **13–14 February 2025**
- **Keynote Speaker** – *Drug Prevention in Academics*  
Student Counseling Center, University of Education, Lahore (Multan Campus) — **16 April 2023**
- **Keynote Speaker** – *Stress Management Techniques in Academics*  
Student Counseling Center, University of Education, Lahore (Multan Campus) — **18 January 2022**
- **Keynote Speaker** – *New Horizons in the Field of Zoology in the Modern Era*  
Government Postgraduate Emerson College, Multan — **29 March 2019**
- **Oral Presenter** – *1st International Conference on Applied Zoology* — **October 2018**
- **Oral Presenter** – *48th Cardiocon* — **November 2018**
- **Participant / Presenter** – *International Zoological Congress*  
Government College University, Faisalabad, Pakistan — **28 February–02 March 2017**
- **Participant** – *30th Pakistan Congress of Zoology (International)*  
University of Agriculture, Faisalabad, Pakistan — **02–04 March 2010**
- **Participant** – *International Zoological Congress*  
Bahauddin Zakariya University, Multan, Pakistan — **27 February–01 March 2007**
- **Participant** – *Two-Day Conference of National Core Group in Life Sciences*  
Bahauddin Zakariya University, Multan, Pakistan — **15–16 November 2006**

#### **International Conferences Attended**

- **Participant** – 2025 Human Cell Atlas General Meeting, held from 9 to 11 June 2025 in Singapore.
- **Poster Presenter** – HCA Asia 2024 Meeting which was held from 3 - 4 December 2024 in Hong Kong SAR.

#### **Trainings**

- **One-Day Hands-On Training Workshop on Taxidermy**  
University of Education, Lahore (Multan Campus) — **16 October 2025**
- **12-Day Hands-On Training in Beekeeping**  
University of Education, Lahore (Multan Campus) — **19–30 August 2024**
- **Capacity Building Programme (8 Days)**  
Qasim Ali Shah Foundation — **29 February 2020 – 25 July 2020**
- **Virtual Training on Biorisk Management (5 Days)**  
**14–18 December 2020**
- **Workshop-cum-Training on Fisheries and Aquaculture (9 Days)**  
African Asian Rural Development Organization (AARDO) — **28 October – 06 November 2020**
- **Workshop-cum-Training on Advanced Techniques in Fishing and Fish Processing (9 Days)**  
African Asian Rural Development Organization (AARDO) — **31 August – 09 September 2021**

## GENE BANK SUBMISSIONS

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### **Toxoplasma gondii (ITS-1, partial sequences)**

1. *Toxoplasma gondii* isolate 07 — PQ587291.1
2. *Toxoplasma gondii* isolate 08 — PQ587290.1
3. *Toxoplasma gondii* isolate 09 — PQ587289.1
4. *Toxoplasma gondii* isolate dog-53 — PQ640592.1
5. *Toxoplasma gondii* isolate dog-66 — PQ640591.1
6. *Toxoplasma gondii* isolate dog-14 — PQ640590.1
7. *Toxoplasma gondii* isolate B-05 — PQ640281.1
8. *Toxoplasma gondii* isolate B-01 — PQ640280.1
9. *Toxoplasma gondii* isolate B-25 — PQ640279.1
10. *Toxoplasma gondii* isolate B-33 — PQ640278.1

### **Hepatozoon spp. (SSU rRNA / 18S rRNA, partial sequences)**

11. *Hepatozoon ophisauri* isolate H\_78 — OR976041.1
12. *Hepatozoon ophisauri* isolate H\_38 — OR976040.1
13. *Hepatozoon ophisauri* isolate H\_33E — OR976039.1
14. *Hepatozoon* sp. isolate 78 — OR921623.1
15. *Hepatozoon* sp. isolate 38 — OR921622.1
16. *Hepatozoon* sp. isolate 33B — OR921621.1
17. *Hepatozoon* sp. isolate 33E — OR921620.1

### **Lankesterella spp. (SSU rRNA, partial sequences)**

18. *Lankesterella* sp. isolate 56 — OR933562.1
19. *Lankesterella* sp. isolate 21 — OR933561.1

### **Theileria spp.**

20. *Theileria lestoquardi* isolate 37 (MSP gene, partial cds) — MZ541895.1
21. *Theileria lestoquardi* isolate 25 (MSP gene, partial cds) — MZ541894.1
22. *Theileria lestoquardi* isolate 133 (MSP gene, partial cds) — MZ541893.1
23. *Theileria ovis* isolate 108 (SSU rRNA) — MZ648445.1
24. *Theileria ovis* isolate 44 (SSU rRNA) — MZ648444.1
25. *Theileria ovis* isolate 138 (SSU rRNA) — MZ648443.1

### **Anaplasma marginale (MSP-1b gene, partial cds)**

26. Isolate 172 — MZ666881.1
27. Isolate 131 — MZ666880.1
28. Isolate 31 — MZ666879.1

### **Hepatozoon canis (18S rRNA, partial sequences)**

29. Isolate Pakistan-4 — KU535871.1
30. Isolate Pakistan-3 — KU535870.1
31. Isolate Pakistan-2 — KU535869.1
32. Isolate Pakistan-1 — KU535868.1

## SUPERVISED THESIS

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### PhD

- Evaluation of Bone Healing Potential of Stone Apple (*Aegle marmelos* L.) in Rats: Role of BMP2/RANK Signaling Cascades
- Microplastic as an Emerging threat to the fresh water fishes: Environmental and Health implications.
- Molecular and Genetics Insights of Human Dwarfism in Affected Families collected from Pakistan

### MPhil

- In Silico Identification of Potential Phytochemical Inhibitors Targeting Ubiquitin Conjugating Enzyme E2N (UBE2N) Involved in Prostate Cancer and RFTs Assessment of Selected Phytochemicals in Albino Mice
- Mutation Analysis of Exon 11 in the CFTR Gene Among Cystic Fibrosis Patients from Southern Punjab, Pakistan
- In Silico Analysis of Potential Phytochemicals Targeting Glutathione Peroxidase 4 (GPX4) in Thyroid Cancer and hematological Toxicity Assessment of Selected Phytochemicals in Albino Mice
- Prevalence and hematological effects of *Toxoplasma gondii* in common Myna (*Acridotheres tristis*)
- Molecular detection of *Hepatozoans* spp. In wild lizard captured from various region in Khyber Pakhtunkhwa, Pakistan
- Prevalence and molecular detection of *Trypanosoma* in buffaloes in Bahawalnagar district of Punjab, Pakistan
- Epidemiological and molecular investigation of Ophthalmological disorders in district Dera Ghazi Khan
- Molecular characterization of candidate genes in familial Intellectual Disability
- Molecular detection of *Theileria annulata* in camel from Layyah district of Punjab, Pakistan
- Epidemiological and associated risk factors of MODY in the population of district Multan.
- Detection of RUNX1 exon 5 alterations in acute myeloid leukemia (AML) patient's central Punjab, Pakistan.
- Role of Probiotics (Ecotec) supplementation on the growth performance and nutrient digestibility of *Labeo rohita* fingerlings fed with linseed meal-based diet.
- Partial replacement of Fish meal with locally available black seeds (*Nigella sativa*) for rohu ( *Labeo rohita*) fingerlings.
- Effect of Phytase supplemented Moringa based diets on growth performance of Tilapia (*Oreochromis niloticus*) fingerlings.
- Effect of Shisha Smoking on Hematological Parameters of Human.
- Molecular detection of various vector borne blood parasites in African Lion (*Panthera leo*). A pioneer study in Pakistan.

- Effect of variable doses of Neodymium zirconate and zinc sulphate on antioxidant profile of selected vital organs of male albino mice

## MSc

- The Impact of Social Media on Sleep Patterns and Academic Performance Among Students
- PCR-Based Detection of *Haemoproteus* spp. in Blood Samples of Wild Birds from Chakwal and Sargodha Districts, Punjab, Pakistan
- Association of single nucleotide polymorphism in TP53 gene with the incidence of ischemic stroke in subjects enrolled from Multan
- Molecular detection of Plasmodium spp. in the blood samples of birds enrolled from Sargodha and Chakwal districts in Punjab.
- Molecular prevalence of Leucocytozoon spp. in the bird blood sample collected from two Districts in Punjab.
- Genotypes at rs1800470 in TGF $\beta$ 1 gene with the incidence of ischemic stroke in subjects enrolled from Multan.
- Association of genotypes at rs1800472 in TGF $\beta$ 1 gene with the incidence of ischemic stroke in subjects enrolled from Multan.
- Sex-specific effects on the markers of oxidative stress in the liver of wild toad captured from Shringal Kyber Pakhtunkhwa
- Sex Specific Effects on the markers of Oxidative Stress in Lungs of Wild Toads captured from Khyber Pakhtunkhwa, Pakistan
- Comparison of Antioxidant Parameters from Small Intestine of Wild Toad Captured from Sheringal in Khyber Pakhtunkhwa, Pakistan
- Comparison of antioxidant parameters from kidney of wild rat in sex specific manner captured from Multan, Pakistan
- Comparison of antioxidants parameters from heart of wild rat in sex specific manner captured from Multan, Pakistan
- Sex specific effects on the markers of oxidative stress in the heart of wild Toad captured From Sheringal Khyber Pakhtunkhwa, Pakistan
- Effect of Short-Term Exposure of Imidacloprid on the Hematology and Selected Parameters of Serum Biochemistry in Genetically Improved Tilapia (*Oreochromis niloticus*).
- Comparison of Hematological Changes Caused by Various Sub-lethal Doses of Imidacloprid in Genetically Improved Tilapia (*Oreochromis niloticus*).
- Comparative Evaluation of Selected Metals in the Blood Serum of Head and Neck Cancer Patients
- Assessment of Selected Metals in the Nails of Breast Cancer Patients
- Comparative Evaluation of Selected Metals, TSH, FT4, FT3 and PTH in the Blood Serum of Hypothyroid Patients With Thyroid Cancer
- Efficacy of Chicken Feathers Digested by Bacillus sp. to Promote Pea Growth Activity
- Efficacy of Chicken Feathers Digested by Chryseobacterium sp. to Promote Pea Growth Activity
- Effect of Sublethal Doses of Zinc Oxide Nanoparticles on Liver Histology of Thaila (*Catla catla*).



- Evaluation of Zinc Oxide Nanoparticles on Blood Biochemistry of Thaila (*Catla catla*) by Intraperitoneal Injection
- Growth Performance of Thaila (*Catla catla*) Following exposure to Zinc Oxide Nanoparticles.

## PUBLICATIONS

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1. Shakoor S, **Latif M**, Kam KH, Nasir A, Mehmood R, Akhtar M, Akhlaq M, Batool B, Ali M, Abass KS, Pasha B, Khan A, Chen CC, Iqbal F. Association of genotypes at single-nucleotide polymorphisms in IL-28B, TGF- $\beta$ 1, TP53, MTHFR and GSTP1 gene and their combinations with ischemic stroke: a case-control study. *IBRO Neuroscience Reports*. 2025. 19: 919-930 <https://doi.org/10.1016/j.ibneur.2025.11.005>
2. Raheel SMMU, Qazi AA, **Latif M**, Naz H, Waqas Y, Lackner M. Unveiling the Microplastics Menace in Freshwater Fishes: Evidence from the Panjnad Barrage, South Punjab, Pakistan. *Fishes* 2025;10(5):198. <https://doi.org/10.3390/fishes10050198> (IF 2.1 Q2)
3. Azeem A, Javed M, Riaz ul Haq M, Shahzeen M, Asif M, Muhammad G, Hussain K, Ali A, **Latif M**, Samad N, Iqbal F. Acute exposure to diafenthion adversely affects the complete blood count, serum biochemical profile and antioxidant parameters of a non target organism, *Ctenopharyngodon idella*. *Pakistan Journal of Zoology* 2025. 57(1):417-425 <https://dx.doi.org/10.17582/journal.pjz/20190713140754>. (IF 0.5 X).
4. Khan MR, **Latif M**, Mansha M, Hussain T, Bin Jordan YA, Metouekel A, Daelbait M, Belkahia H, Iqbal F, Ben Said M. Genetic Characterization and Phylogenetic Analysis of Common House Crows (*Corvus splendens*). *Scientific Reports*. 2025. 15(1):4871. doi: 10.1038/s41598-025-85207-8. (IF 3.8)
5. Shabbir S, **Latif M**, Khan AU, Khalid M, Fatima H, Azhar h, Khalid S, Salim M, Khan A, Muqaddas H, Daelbait M, Ibenmoussa S, Dawoud TM, Iqbal F. Leading report on the molecular prevalence of emerging pathogens *Hepatozoon* sp. and *Lankesterella* sp. in the blood samples of seven wild lizard species. *Scientific Reports*. 2025. 15(1):9014. doi: 10.1038/s41598-025-91185-8 (IF 3.8, Q1)
6. Ullah R, Afgan S, Akhtar M, Asif M, **Latif M**, Mehmood R, Naeem M, Zahra K, Farooq M, Ben Said M, Iqbal F 2023. Absence of GSTT1 and polymorphisms in GSTP1 and TP53 are associated with the incidence of acne vulgaris. *Skin Research and Technology*. 29(4): e13333. (IF. 2.24).
7. Rasool M. F, Rehman A. U, Khan I, **Latif M.**, Ahmad I, Shakeel S, Sadiq M, Hayat K, Shah S, Ashraf W, Majeed A, Hussain I, Hussain, R. (2023). Assessment of risk factors associated with potential drug-drug interactions among patients suffering from chronic disorders. *Plos one*, 18(1), e0276277 (IF. 3.7).
8. Mustafa S, Hussain MF, **Latif M**, Ijaz M, Asif M, Hassan M, Faisal M, Iqbal F. A Missense Mutation (c.1037 G > C, p. R346P) in PAPSS2 Gene Results in Autosomal Recessive form of Brachyolmia Type 1 (Hobaek Form) in A Consanguineous Family. *Genes* 2022, 13, 2096. <https://doi.org/10.3390/genes13112096> (IF. 3.91).
9. Qazi AA, Ali M, **Latif M**, Naqvi SA, Jalbani S, Jabeen F, Iqbal R, Farooq Z, Malik K, Naz A,

- Hussain S 2023. The level and distribution of selected organochlorine pesticides in water of River Satluj Pakistan. *Brazilian Journal of Biology*. 9;83. (IF. 1.71).
10. Qazi AA, Ali M, Jabeen F, Iqbal R, Iqbal MA, **Latif M**, Farooq Z, Kausar T, Naz A, Naqvi SA, Hussain S 2022. Presence of selected organochlorine pesticides (OCPs) in sediments and biota of River Satluj, Pakistan: first report. *Brazilian Journal of Biology*. 14;83. (IF. 1.71).
  11. Sher Afgan MA, Yaqoob I, **Latif M**, Sajid Z, Akram K, Mujtaba G, Hussain M, Farooq M, Said MB, Iqbal F 2023. Association of GSTT1, GSTM1 and SNP rs1695 in GSTP1 with the Incidence of Rheumatoid Arthritis in Southern Punjab, Pakistan: A Case-Control Study. *Pakistan Journal of Zoology* (IF. 0.684)
  12. Ali S, Hassan Bin Asad MH, Javed MA, Javed T, Al- Kharaman YM, **Latif M**, Mohsin S, Nawaz T, Farid Hasan SM, Iqbal J, Babak B. A novel synthetic derivative of biaryl guanidine as a potential BACE1 inhibitor, to treat Alzheimer's disease: In-silico, in-vitro and in-vivo evaluation. *Pakistan Journal of Pharmaceutical Sciences*. 2022 Sep 1;35(5). (IF.0.684)
  13. Waqas A, Nayab A, Shaheen S, **Latif M**, Rafeeq MM, Ziaullah MS, Umair M 2022. Biallelic Variant in the tRNA methyltransferase domain of the AlkB Homolog 8 causes Syndromic Intellectual Disability. *Frontiers in Genetics*, 776. (IF. 4.772)
  14. Tanveer M, Farooq M, Amjad M, Asif M, Kashif, M, **Latif M**, Khan A, Aktas M, Said MB, Iqbal F 2022. "Molecular prevalence, associated risk factors and phylogeny of *Anaplasma marginale*, *Theileria ovis* and *T. lestoquardi* in sheep from Pakistan." *Comparative Immunology, Microbiology and Infectious Diseases*. 101822. (IF.2.729)
  15. Ahmad, N, Hussain SM, Azam SM ,Shahzad M, Noureen A,Yaqoob R, **Latif M** 2022. Effects of Se nanoparticles supplementation on growth performance, hematological parameters and nutrient digestibility of Labeo rohita fingerling fed sunflower meal-based diet. *Brazilian journal of biology*" 84. (IF. 1.651)
  16. Ahmad, N, Hussain SM, Azam SM ,Shahzad M, Noureen A,Yaqoob R, **Latif M** 2022. Effects of Se nanoparticles supplementation on growth performance, hematological parameters and nutrient digestibility of Labeo rohita fingerling fed sunflower meal-based diet. *Brazilian journal of biology*" 84. (IF. 1.651)
  17. Mustafa S, Bukhari F, Aftab MZ, Asif M, Amjad M, Ijaz M, **Latif M**, Iqbal F 2021. A Missense Mutation in *COL10A1* Gene in a Pakistani Consanguineous Family with Schmid Type Metaphyseal Chondrodysplasia. *Pakistan Journal of Zoology*. (IF. 0.68)
  18. Jaleel W, Li Q, Shi Q, Qi G, **Latif M**, Ali S, Yasin NA, Lyu L, He Y 2021. Using GCMS to find out the Volatile Components in the Aroma of Three Different Commercial Fruits in China. *The Journal of Animal & Plant Sciences*, 31(1):166-174. (IF. 0.57)
  19. Mustafa S, Akhtar Z, Asif M, Amjad M, Ijaz M, **Latif M**, Hassan M, Faisal M, Iqbal F 2020. Novel missense variants in FGFR1 and FGFR3 causes short stature in enrolled families from Pakistan. *Meta Gene*
  20. Abbas S, Sherazi M, Khan A, Alyami HS, **Latif M**, Qureshi ZUR, Majeedullah, Asad MHHB 2021. Investigation of Plantago *ovata* Husk as Pharmaceutical Excipient for Solid Dosage Form (Orodispersible Tablets) BioMed Research International. <https://doi.org/10.1155/2021/5538075> (IF. 3.246)
  21. Din MU, Ali A, Yasir M, Jilani MI, Shoaib S, **Latif M**, Ahmad A, Naz S, Aslam F, Iqbal M,

- Nazir A 2021. Chemical Composition and *in vitro* Evaluation of Cytotoxicity, Antioxidant and Antimicrobial Activities of Essential Oil Extracted from *Myristica Fragrans* Houtt. Polish Journal of Environmental studies. 30(2):1585-1592 (IF. 1.871)
22. Bokhari TH, Bano S, Tanveer M, Khan SG, Hina S, Jilani MI, **Latif M**, Ibrahim SM, Iqbal M, Nazir A 2020. Estimation of Mineral Composition, Antioxidant, Antimicrobial, Biofilm Activity and HPLC Profile of *Halothamnus auriculus*. Polish Journal of Environmental studies. 30(2):1557-1562 (IF. 1.871)
  23. Wasim M, Mannan A, Ullah K, Yameen MA, **Latif M**, Ahmad T, Ullah M, Amirzada MI, Khan HU, Maheen S, Khan SA, Jamil QA, Asad MHMB, Hussain I 2020. Effect of varying quantities of polymer on preparation and stability evaluation of carbamazepine cocrystals with dicarboxylic acid coformers. Pakistan Journal of Pharmaceutical sciences. 3(4):1755-1761. (IF. 0.682).
  24. Munir T, **Latif M**, Mahmood A, Malik A, Shafiq F 2020. Influence of IP-injected ZnO-nanoparticles in *Catla catla* fish:hematological and serological profile. Naunyn-Schmiedeberg's Archives of Pharmacology. (IF. 3.195).
  25. Aslam N, Javed T, Khalid S, Shaheen N, Fatima S, **Latif M**, Afzal M, Afzal S, Abbas K, Yameen MA, Al-Kharaman YMSA, Amirzada MI, McCleary RJR, Rizvanov AA, Asad MHMB 2020. Antiprotease Activity of Indigenous Medicinal Plants against Pakistani *Echis carinatus* Venom. Pharmacognosy Magazine. 16 (69):416-421. (IF. 0.948)
  26. Yasin S, Mustafa S, Ayesha A, **Latif M**, Hassand M, Faisal M, Makitief O, Iqbal F, Naz S 2020. A novel homozygous missense variant in MATN3 causes spondyloepimetaphyseal dysplasia Matrilin 3 type in a consanguineous family. European Journal of Medical Genetics (IF. 2.465)
  27. Mustafa S, Akhtar Z, **Latif M**, Hassan M, Faisal M, Iqbal F 2020. Novel nonsense mutation in NPR2 gene causing Acromesomelic dysplasia, type Maroteaux in a consanguineous family in Southern Punjab (Pakistan). Genes & Genomics. (42):847–854 (IF. 2.164)
  28. Aslam S, Khosa T, Akbar A, **Latif M**, Chaudhary MA, Shaikh SR, Iqbal F 2020. Single nucleotide polymorphism (rs7543472) in EPHA2 gene is associated with age- related cataract in subjects enrolled from Multan in southern Punjab: A case-control study. Journal of Medical Association. (70):583-90 (IF. 0.642)
  29. Imran M, Javed T, Jabeen A, Mehnaz G, Ullah K, Shaheen N, Khalid S, Amirzada MI, Yameen MA, Hasan FSM, Shah SH, Rauf K, Schenk G, McGeary R, Pieters L, **Latif M**, Al-Kahraman YMSA, Asad MHMB 2020. Synthesis, characterization and docking studies of amide ligands as anti-leishmanial agents Pakistan Journal of Pharmaceutical Science. (33)1(Suppl):385-392. (IF. 0.863).
  30. Akram IA, Akhtar S, Khadija G, Awais MM, **Latif M**, Noreen A, Mobeen M, Sajjad F, Sardar Z, Iqbal S, Ashiq MN, Iqbal F 2020.Synthesis, characterization, and biocompatibility of lanthanum titanate nanoparticles in albino mice in a sex-specific manner. Naunyn-Schmiedeberg's Archives of Pharmacology. (393):1089– 1101. (IF.3.00)
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## REFERENCES

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### Dr. Muhammad Ali

Professor of Zoology | Vice Chancellor

University of the Punjab, Pakistan

☎ Cell: +92 300 6306745


✉ Email: [vc@pu.edu.pk](mailto:vc@pu.edu.pk) | [alisam007@hotmail.com](mailto:alisam007@hotmail.com)

### Dr. Furhan Iqbal

Associate Professor of Zoology

Institute of Pure and Applied Biology

Bahauddin Zakariya University, Multan, Pakistan (68000)

 Cell: +92 331 5657685

 Email: [furhan.iqbal@bzu.edu.pk](mailto:furhan.iqbal@bzu.edu.pk)