RESUME

Dr. Abdullah Shah

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EDUCATION:

| 2013-2017 | Ph. D. Biochemistry & | University of Science & |
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| | Molecular Biology | Technology of China (USTC). |
| 2009- 2012 | M. Phil. Animal Genomics & Biotechnology | KP Agricultural University, Peshawar, Pakistan. |
| 2004- 2008 | B.S. (Hons), Biotechnology | University of Malakand, Pakistan. |

Employment:

Currently working as Assistant Professor in the Department of Biotechnology, Shaheed Benazir Bhutto University Sheringal Dir (U), Pakistan (July 2018-till to date)

Research Interests:

- Gene regulation by miRNAs, Role of miRNAs in different human diseases, Proteinprotein interactions and their involvement in different human diseases.
- Detection of mutations in different human viruses and their roles in host immune evasion.
- Detection of genes polymorphism in relation to economic traits in bovine and ovine breeds.

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Ph. D. Research Projects:

Thesis Project:

The DEAD-Box RNA Helicase DDX3 interacts with ALKBH5 to regulate m6A RNA Demethylation

Other Projects:

- 1. Upregulation of miR-3648 upon ER stress and its regulatory role in cell proliferation
- 2. Identification of miR-34a targets using biotinylated-miRNA pulldown
- 3. The isolation of an RNA aptamer targeting to p53 protein with single amino acid mutation

M. Phil. Research Projects:

Thesis Project:

Study on Callipyge (CLPG) gene Polymorphism in Kajli, Lohi and Thalli Sheep Breeds.

Other Projects:

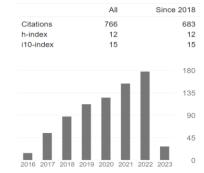
Genetic analysis of different Genes (*CAST*, *PRL*, *k-CN*, *LEP* and *CAPN*) in Pakistani Cattle and Bovine Breeds.

Research / Teaching experience:

Teaching at all levels Experience in different Molecular Biology techniques: Handling Human and animal cells Gene Cloning, Plasmids Construction and transfections DNA, RNA and Protein extraction qPCR, RNA Immunoprecipitation (RIP), Northern blot, Dot blot Western blot, Immunoprecipitation. Immunofluorescence, Analysis human miRNAs Luciferase Assays MTT / Migration /Soft Agar Assays Colony formation Assays CRISPR-Cas9 technique RACE Techniques Different Bioinformatics tools

Publications: (*Co-first author/, [#]Corresponding author)

Total impact factor: 105.96 Total Citations: 766 Total Reads: 6146



- Abdullah Shah, Rashid F, Awan HM, et al. The DEAD-Box RNA helicase DDX3 interacts with m⁶A RNA demethylase ALKBH5. *Stem cells International*. 2017. (Q1; IF; 5.443).
- 2. Abdullah Shah, Saira Rehmat, Muhammad Suleman et al., Comparative mutational analysis of SARS-CoV-2 isolates from Pakistan and structural-functional implications using computational modelling and simulation approaches. *Computers in Biology and Medicine*. 2022. (Q1; IF=6.698).
- 3. Abdullah Shah[#], Aziz A, Ghafoor A, Suleman M, et al. Molecular Analysis of Callipyge Gene Mutation (C.267A>G) in Kajli, Lohi and Thalli Sheep breeds of Pakistan. Russ. J. Genet. 2017. (IF; 0.58)
- 4. Abdullah Shah, Rashid F, Aziz A, Suleman M, et al. Genetic characterization of structural and open reading Fram-8 proteins of SARS-CoV-2 isolates from different countries. *Gene Reports*. 2020. (IF; 0.610)
- Farooq Rashid*, Awan HM, Abdullah Shah*, et al. Induction of miR-3648 upon ER stress and its regulatory role in cell proliferation. *Int. J. Mol. Sci.* 2017. (Q1; IF; 6.208).
- Awan HM*, Abdullah Shah*, Rashid F*, et al. Comparing two approaches of miR-34a target identification, biotinylated-miRNA pulldown vs miRNA overexpression. RNA Biol. 2017. (Q2; IF; 5.350).
- 7. Farooq Rashid, Abdullah Shah*, Shan G. Long Non-coding RNAs in the cytoplasm. *Genomics Proteomics and Bioinformatics*. 2016, (Q1; IF; 7.691).
- 8. Awan HM, Abdullah Shah, Rashid F, and Shan G. Primate specific lncRNAs and miRNAs. *Genomics Proteomics and Bioinformatics*.2017. (Q1; IF; 7.691).
- 9. Chen L, Rashid F, **Abdullah Shah**, Awan HM, et al. The isolation of an RNA aptamer targeting to p53 protein with single amino acid mutation. *Proc Natl Acad Sci U S A*. 2015, (**Q1**; IF; 11.205).
- Farooq Rashid, Muhammad Suleman, Abdullah Shah, et al. Structural Data on the SARS-CoV-2 NSP13 Mutants Revealed Altered Bonding Network with TANK Binding Kinase 1 to Evade Host Immune System. Frontiers in Microbiology (Q1; IF=6.064).

- 11. Farooq Rashid, Muhammad Suleman, **Abdullah Shah**, et al. Mutations in SARS-CoV-2 ORF8 altered the bonding network with interferon regulatory factor 3 to evade host immune system. (Frontiers in Microbiology (**Q1**; IF=5.640).
- Farooq Rashid, Muhammad Suleman, Abdullah Shah, et al. Roles and Functions of Sars-Cov-2 Proteins in Host Immune Evasion (Front.in Immunology 2022. (Q1; IF; 8.786).
- 13. Abdul Aziz, Muhmmad Suleman, Abdullah Shah et al., Comparative mutational analysis of the Zika virus genome from different geographical locations and its effect on the efficacy of Zika virus-specific neutralizing antibodies.(Frontiers in Microbiology. 2023 (Q1; IF=6.064).
- 14. Amin Ullah Jan, Fazal Hadi, **Abdullah Shah**, et al. Plant growth regulators and EDTA improve phytoremediation potential and antioxidant response of Dysphania ambrosioides (L.) Mosyakin & Clemants in a Cd-spiked soil. Environmental Science and Pollution Research. 2021. (**Q2**; IF=5.053).
- 15. Abdul Ghafoor, Aamir B. Z, **Abdullah Shah**, et al. Kappa-Casein (κ-cn) gene polymorphism in achai, sahiwal cow and nili-ravi buffalo breeds. Int. J. Dairy Technol. 2012, (**Q1**; IF; 4.374).
- 16. Abbas Khan,...**Abdullah Shah**...et al. SARS-CoV-2 (B.1.618) Variant Slightly Alter the Spike RBD-ACE2 Binding Affinity and is an Antibody Escaping Variant: (Computational Structural Perspective.2021. RSC Advances (**Q2**; IF=4.361)
- Rafaqat I, Suleman M,....Abdullah Shah, et al. Prolactin Gene Polymorphism in Nili-Ravi Buffaloes, Sahiwal and Achai Cattle. Int. J. Dairy Technol. 2012. (Q1; IF; 4.374).
- Amin Ullah Jan, ...and Abdullah Shah. Role of Potassium, Zinc and Gibberellic Acid in Increasing Drought Stress Tolerance in Sunflower (Helianthus Annuus L.) Pak. J. Bot., 2019. (IF=; 0.972).
- 19. Zainib Babar, Mazhar Khan,...Abdullah Shah, et al. Drug similarity and structurebased screening of medicinal compounds to target macrodomain I from SARS-CoV-2 to rescue the host immune system: a molecular dynamics study. (Journal of Biomolecular Structure and Dynamics. 2020. (IF=3.220).
- 20. Nasir Abbas, Aamer Bin Zahur,....Abdullah Shah[#], et al. Molecular Analysis of Leptin Gene Polymorphism in Achai, Sahiwal Cattle and Nili-ravi Buffalo Breeds of Pakistan (International Journal of Genetics and Genomics)
- 21. Mushtaq Ahamd Khan, Ziaul Islam....and **Abdullah Shah**. Seroepidemiology of Toxoplasma Gondii Infection in Child Bearing Age Women in Dir Khyber Pakhtunkhawa Pakistan. P.J.Z. 2019. (IF=0.970).
- 22. Abbas Khan, Shaheena Umbreen.... Abdullah Shah et al. In Silico Mutagenesis based remodeling of SARs-CoV-1 peptide (ATLQAIAS) to inhibit SARs-CoV-2:

Structural-dynamics and Free energy calculations. (Interdisciplinary sciences, computational life sciences (**Q2**; IF=2.223).

- 23. Abdul Aziz, Treeza Pervaiz,..... **Abdullah Shah**,[#] et al. Development of multiplex PCR for rapid detection of E.coli (APEC), Salmonella, Mycoplasma synoviae and Mycoplasma gallsepticum. 2021. Gene reports (IF; 0.610).
- 24. Rashid F, Abbas M.A,....**Abdullah Shah**, et al. Induction of Immunosuppression in Broiler Chicken upon Co-infection of Avian Adenovirus-4 with Low Pathogenic Avian Influenza H9N2. *Pak. Vet. J.* 2017. (IF; 1.318)
- 25. Muhmmad Suleman, Abdul Ghafoor,....Abdullah Shah, et al. Calpastatin (*CAST*) gene polymorphism in Kajli, Lohi and Thalli sheep breeds. Afr. J. Biotechnol. 2012, (IF; 0.45).

Research Projects:

Completed Research Project (As principle author)

Analysis of DNA Polymorphism of Callipyge (*CLPG*) and Calpastatin (*CAST*) gene in endangered Kutta Sheep breed of Pakistan (SRGP Project; PKR= 0.484646 Million).

Award and Professional Affiliation:

- Thinese Govt. Scholarship for PhD (2013-2017).
- Travel grant from Higher Education Commission of Pakistan.
- The MPhil, PhD Semester coordinator, SBBU, Sheringal, Dir (U) KP, Pakistan.
- Focal Person of the Biotech Society of SBBU, Sheringal, Dir (U) KP, Pakistan.

Conferences and Workshops:

- The 8th Biennial meeting of Chinese RNA society, The Chinese Society of Biochemistry and Molecular Biology, April 11-13, 2014, China.
- SAARC regional conference on new frontiers in Agricultural Genomics and Biotechnology (5-7 June, 2012) Islamabad Pakistan.
- ^{3ed} one day workshop on Bioinformatics (June 18th, 2012) Department of Bioinformatics Mohammad Ali Jinnah University Islamabad.
- Ist National symposium on Biotechnology: Recent advances (21-24 may 2007), Department of Biotechnology, University of Malakand, Khyber Pukhton Khwa, Pakistan.

- Mational conference on "Recent Trends in Livestock Genomics" (24-25th June 2009), Department of Molecular Biology and Biotechnology, UVAS, Lahore.
- "Biosafety Awareness Workshop" organized by Department of Biotechnology, Shaheed Benazir Bhutto University Sheringal in collaboration with Pakistan Biological Safety Association (PBSA) (October 26th, 2018).

Languages: English (Professional in writing, reading, speaking and listening), Urdu, Arabic

MPhil/BS Students Supervised/ Co-Supervised

| S.No | | Name of Scholar | Supervision | Session |
|------|---------|------------------|---------------|-----------|
| 1 2 | MPhil | Syed Ansar Ahmad | Supervised | 2019-2021 |
| 3 | Μ | M. Aslam | Co-Supervised | 2019-2021 |
| 4 | | Hina Hasin | Co-Supervised | 2019-2021 |
| 1 | | Sami Ullah | Supervised | 2017-2021 |
| 2 | (u | Rafi Uddin | Supervised | 2017-2021 |
| 3 | Ho | Yasir Aziz | Supervised | 2017-2021 |
| 4 | BS(Hon) | Nazim Ul Haq | Supervised | 2017-2021 |
| 5 | | Muhammad Danish | Supervised | 2018-2022 |

REFERENCES:

1. Ge Shan, Ph. D. Professor School of Life Sciences University of Science and Technology of China 443 Huangshan Road Hefei, Anhui Province 230027 China E-mail: shange@ustc.edu.cn Tel: 0086-551-63606274