

KOMAL ASLAM

Assistant Professor
Department of Biotechnology
Kinnaird College for Women, Lahore
Komal.aslam@kinnaird.edu.pk



EDUCATION

Ph.D Biotechnology (2019 - 2024)

Lahore College for Women University.

Research Entitled: “Genetic Analysis of Autosomal Recessive Primary Microcephaly and its Genotype Phenotype Correlation in Pakistani Population”

M.Phil. Biochemistry (2016 - 2018)

Kinnaird College for Women, Lahore.

Research Entitled: “Genetics Studies of Families Affected with Primary Microcephaly”

PUBLICATIONS

1. Abdullah M., **Aslam K.**, Akhtar R. et al. (2026). Genetic analysis of the *TPO* gene associated with hypothyroidism in pakistani families. *Frontier in Medical and Health Research*, 4(1), 373-381.
2. Anjum I., **Aslam K.**, Baig. et al. (2025). A novel indel *CYP1B1* variant in a large multigenerational Pakistani family expands the mutation spectrum of primary congenital glaucoma. *Molecular Biology Reports*, 53(1), 1-9.
3. Asif R., Bashir R., Khalid A., **Aslam K.**, Yousaf K., Waseem R. (2025). Genetic association of single nucleotide polymorphisms in *PLEKHA7* gene with primary angle closure glaucoma (PACG) in a Central-Eastern Punjab cohort of Pakistan. *Molecular Biology Reports*, 52(1), 1-8.
4. **Aslam K.**, Saeed A., Saeed I. et al. (2024) “Molecular genetics, neuroimaging outcomes, and structural analyses of novel and recurrent variants of *WDR62* gene in two consanguineous Pakistani families with autosomal recessive primary microcephaly”. *Molecular Biology Reports*. 51: 783. <https://doi.org/10.1007/s11033-024-09728-7>.
5. **Aslam K.**, Saeed A, Jamil I, Saeed HI, Khan R, Hassan S, Rafiq S, Asif M, Makhdoom EUH, Bashir R, Hussain MS, Baig SM, Anjum I. (2024) “Investigating the effects of a single *ASPM* variant (c.8508_8509) on brain architecture among siblings in a consanguineous Pakistani family”. *Molecular Biology Reports*. 51(1):104.

6. **Aslam K**, Anjum I, Aslam K, Haq R, Bashir R. (2023) Genetic susceptibility of *vitamin D receptor* gene polymorphisms on autosomal recessive primary microcephaly patients in Pakistani population: a case-control and *in-silico* study. *Molecular Biology Reports*. 50(10):8049-8059.
7. **Aslam K**, Saeed HI, Alyas J, Saeed A, Majeed T, Anjum I. (2021) "Role of Microorganisms in Bioremediation". *Pakistan Journal of Biochemistry and Biotechnology*, 2(2), 140-176.
8. **Aslam K**, Jabeen S, Jafri SS, Saeed A, Anjum I. (2020) "The Molecular Genetics of Selective Tooth Agenesis". *Journal of the Pakistan Medical Association*. 70(11): 2023-2027.
9. William B, Riaz I, Mubashir S, **Aslam K**, Saeed A, Anjum I. (2019). "Dyslipidemia as a Risk Factor for Developing Hypertension and Cardiovascular Disease in Females of Reproductive Age". *Journal of Natural and Applied Sciences Pakistan*. 1(2): 139-147.
10. Aslam K, Anjum I, Aslam K, Bashir R. "Association of Vitamin D Receptor Gene Polymorphisms with Autosomal Recessive Primary Microcephaly in the Pakistani Population: Insights from a Case-Control and In-Silico Analysis". *Kinnaird's 3rd International Conference on Science, Technology and Innovation*, 18-20 February, 2025. Kinnaird College for Women, Lahore. (ABSTRACT; Oral Presentation).
11. **Aslam K**, Saeed A, Jamil I, Saeed I, Khan R, Hussain M.S, Baig S, Anjum I. "Different Brain Architecture in Siblings with a known *ASPM* variant for primary microcephaly" . *Kinnaird's 2nd International Conference on Science, Technology and Innovation*, 8-10 March, 2023. Kinnaird College for Women, Lahore. (ABSTRACT; Oral Presentation).
12. Alyas J, **Aslam K**, Anjum I. "Linkage Studies and In Silico Analysis of *CDK5RAP2* and *CASC5* genes missense mutations in families affected with primary microcephaly". *Kinnaird's 2nd International Conference on Science, Technology and Innovation*, 8-10 March, 2023. Kinnaird College for Women, Lahore. (ABSTRACT; Oral Presentation)
13. **Aslam K**, Akhtar R, Aslam K, Saeed A, Bashir R, Akhtar k, Anjum I. "Statistical Landscape of families Affected with Primary Microcephaly". *Kinnaird's 3rd International Conference on Social Sciences and Humanities*. 17-19 May, 2022. Kinnaird College for Women, Lahore. (ABSTRACT; Oral Presentation)
14. **Aslam K**, B Rasheeda, Anjum I. "Role of MCPH genes in Causing lung cancer". 5-7 November, 2021. 20th Shaukat Khanum Cancer Symposium. (ABSTRACT; E-Poster Presentation)
15. Saeed A, **Aslam K**, Sabir S, Khan HM, Jamil I, Khan AK, Saeed HI, Anjum I. "*ASPM* Not the Underlying Causative Gene for 20 Families Affected with Autosomal Recessive Primary Microcephaly". 30-31 March, 2019. *Emerging Scientist 2019*, 30-31 March, 2019. Asian Council of Science Editors, Faisalabad, Pakistan. (ABSTRACT; Poster Presentation)
16. Khan AK, **Aslam K**, Saeed A, Anjum I. "Exclusion Mapping of Three Microcephalic Families with the *ASPM* Gene." *Kinnaird's 1st International Conference on Science*,

Technology and Innovation, 2-4 April, 2019. Kinnaird College for Women, Lahore. (ABSTRACT; Poster Presentation)

17. **Aslam K**, Saeed A, Khan AK, Saeed HI, Nathaniel S, Anjum I. “The Genetic Landscape of Two Primary Microcephalic Families So Far”. Kinnaird’s 1st International Conference on Science, Technology and Innovation, 2-4 April, 2019. Kinnaird College for Women, Lahore. (ABSTRACT; Oral Presentation)
18. Saeed A, **Aslam K**, Murtaza N B, Anjum I. (2022). Applications in Human Genetics, Chapter 13: Intellectual Disabilities; Omics Technologies for Clinical Diagnosis and Gene Therapy: Medical, Bentham Science Publishers.1-27. (BOOK CHAPTER)

RESEARCH INTEREST & EXPERTISE

Research interests include isolating and analyzing DNA from blood and microbial samples, Agarose Gel Electrophoresis, DNA-PAGE, Polymerase Chain Reaction (PCR) optimization, and Sanger Sequencing Data handling (DNASar, UniPro UGene). Expertise in identifying novel pathogenic variants through advanced molecular biology and bioinformatics techniques. Expertise in Microbiological techniques, Statistical tools (SPSS, MiniTab, GraphPad Prism), Referencing tools (EndNote), and various AI and Bioinformatics tools