

Tehreem Tahir



Personal details

Email address	tehreemtahir448@gmail.com
Phone number	00923367677810
Address	House No 448, Street 16, Block B, Rawalpindi, Pakistan
Date of birth	November 28, 1990
Gender	Female
Nationality	Pakistani
Education	

Dec 2014 - Jan 2016	MS Biochemistry (18 Years Education) Institute of Biochemistry & Biotechnology, University of the Punjab, Lahore Research Project: Cloning and overexpression of α -amylase from a locally isolated bacterial strain
Dec 2009 - Jan 2013	BS Biochemistry (16 Years Education) Institute of Biochemistry & Biotechnology, University of The Punjab, Lahore Research Project: Effect of Tsg101 Silencing on Endocytic Rab Proteins

Employment

Apr 2017 - Present	Senior Scientific Officer Institute of Biomedical and Genetic Engineering (IBGE), Islamabad, Pakistan. Services established as Project In-charge 1. Prenatal conventional cytogenetics test: Chromosomal analysis through amniotic fluid. Service offered in 2020. 2. Prenatal Rh (factor) incompatibility test: Noninvasive method to detect fetal Rh factor from maternal blood. Service offered in 2021 for the first time in Pakistan
--------------------	---

3. Prenatal Rapid Aneuploidies Detection (RAD) test: Rapid detection of classical chromosomal abnormalities prenatally through fragment analysis—service offered in June, 2022.
4. Chromosomal Microarray service established in 2024

Projects:

1. DNA Damage Project: To establish a facility for the estimation of DNA damage due to radiation exposure through cytogenetic biodosimetry
2. Cytogenetics/ karyotyping: Performance & Analysis
3. Chromosomal Microarray (CMA)
4. Effect of lidocaine infusion on postoperative analgesia
5. Expression Profiling of Tumorigenesis Genes in Patients of Laryngeal Papillomatosis

Publications

1. Potential Risk Assessment of miR-143 Gene Polymorphisms rs41291957 and rs353292 in Colorectal Cancer : <http://dx.doi.org/10.14715/cmb/2020.66.7.25>
2. Tehreem T, Tahira B, Nasreen R. Cell Free Fetal DNA As Biomarker for Pregnancy Loss Disorders. Am J Biomed Sci & Res.2022 7(4) AJBSR.MS. ID.002369
3. Tahir, T. (2022). Rabs Mediated Membrane Trafficking in Cancer Progression. Digital Medicine and Healthcare Technology
4. Tahir, T., Mansoor, S., & Mansoor, A. (2024, August). Selection of Suitable Internal Control Gene for Analyzing Innate and Humoral Immune Responses in COVID-19 Gene Expression Studies. In 2024 21st International Bhurban Conference on Applied Sciences and Technology (IBCAST) (pp. 159-162). IEEE.

Document control officer (DCO): For implementation, surveillance of:

1. ISO 9001:2015
2. ISO 15189:2022

Skills

Cytogenetics & Molecular Cytogenetics techniques and analysis, Microarray, Fluorescent in situ hybridization, Animal cell culturing, cryopreservation, transfection & recombinant expression in animal cell lines. Gene Therapy, DNA Sequencing & fragment analysis, Basic Bioinformatics competences: Primer designing, whole exome sequencing with data analysis, statistical analysis using different software, AFLP/RFLP, real-time PCR

Courses

Feb 2026	Workshop on Cell and Gene Therapy: Research and Applications, The Aga Khan University (AKU), Karachi, Pakistan
Feb 2026	Workshop on CAR-T Cell Therapy: Prospects of Design and Application, The Aga Khan University (AKU), Karachi, Pakistan
Feb 2025	Coding for Biologists, School of Interdisciplinary Engineering & Science (NUST), Islamabad, Pakistan

Feb 2023	Radiation Medical Emergency Training, Radiation Emergency Assistance Center/Training Site (REAC/TS), Oak Ridge, USA
Feb 2021	ISO 15189 Accreditation Training, Pakistan National Accreditation Council (PNAC), Islamabad, Pakistan
Apr 2020	Cytogenetics and Prenatal Diagnosis, Armed Forces Institute of Pathology (AFIP) Islamabad, Pakistan

Achievements

1. Merit Scholarships throughout academics (University of the Punjab, Lahore)
2. Merit Award in BS Biochemistry (2009-2016)
3. Distinction in BS Biochemistry at the University of the Punjab
4. Outstanding performance award, 2025

References

1. Prof[®]. Dr. Azra Khanum Tamgha-i-Imtiaz
Visiting Faculty, University Institute of Biochemistry and Biotechnology
Former Dean, Faculty of Sciences; PMAS-Arid Agriculture University, Rawalpindi
2. Dr. Saima Siddiqi, Tamgha-i-Imtiaz
Deputy Director and Chief Scientific Officer
Institute of biomedical & genetic engineering (IBGE), Islamabad.
3. Dr. Uzma Abdullah
Assistant Professor, PMAS-Arid Agriculture University