

MARIA TAYYAB BAIG

PERSONAL PROFILE

- Father's Name: Muhammad Tayyab Baig
- Date of Birth: September 10, 1984
- CNIC: 35202-7939655-2
- Domicile: Lahore
- Marital status: Single
- Religion: Islam
- E mail: baig.maria@yahoo.com

AREAS OF STRENGTH

- Adequate knowledge and background of Molecular Biology, Cell Biology, Microbiology, Molecular Genetics, Human Genetics and Biochemistry.
- Good comprehension of scientific information and its application.
- Determination, persistence, problem solving, goal orientation and adaptability to new situations
- Appreciate positive criticism and learn from it.
- Good communication and effective presentation skills

CURRENT POSITION

Research Officer cum Lecturer

National Centre of Excellence in Molecular Biology,
University of the Punjab, 87-West Canal Bank Road,
Thokar Niaz Baig, Lahore, Pakistan.

EDUCATION

2013-2015	Punjab University		Lahore
	M.Phil Molecular Biology	4.00 CGPA	
2003-2007	Punjab University		Lahore
	BSc. Hons. Microbiology and Molecular Genetics	3.72 CGPA	
2000-2002	Govt. Jinnah Degree College		Lahore
	F.Sc., Pre-Medical.	793 out of 1100	
1998-2000	Al-Marooj Grammar Girls High School		Lahore
	Matriculation, Science	668 out of 850	

RESEARCH EXPERIENCE (2007 – TO DATE)

1. STEM CELLS (2008-TO DATE)

Working on isolation of adipose tissue derived stem cells from rats and mice, differentiation of these stem cells towards hepatic lineage and their potential to repair damaged rat liver.

1. Isolation of Adipose derived Stem cells (ADSCs) from murine source.
2. Characterization of these ADSCs by FACS and immunostaining.
3. Differentiation of ADSCs towards hepatic lineage in vitro and their potential to repair damaged liver in rats.
4. Isolation of human adipose derived stem cells and their differentiation towards hepatic lineage.

2. GENETIC DISEASES (2006-2007)

Worked on carrier detection of Haemophilia A at The Children's Hospital and The Institute of Child Health, Lahore as part of thesis requirement for BSc. (Hons.) degree. The work included:

1. Sample collection and recording patient and family history
2. Pedigree Analysis
3. DNA extraction from blood
4. PCR for detection of allelic variants of intron 13 CA repeats in patient and his family
5. Data analysis for carrier detection in siblings of the Haemophilia A patient.

ACHIEVEMENTS

- Won Two Gold Medals in M. Phil
- Won National Science Communication Challenge 2014 organized by American Society of Microbiology, CEMB and NAYS
- Won Scholarship during my B.Sc. [Hons.] in sixth semester 2006.
- Won Scholarship in 8th Grade for Highest Score in the School
- Prefect of the School
- Position holder throughout school life.

LABORATORY SKILLS

- Stem Cell Culturing and Maintenance
- Immunostaining
- RNA Extraction
- Protein Extraction
- Reverse Transcriptase PCR
- Animal Transplantation
- Spectrophotometry
- Polymerase Chain Reaction (PCR)
- Agarose Gel Electrophoresis
- Polyacrylamide Gel Electrophoresis
- DNA extraction
- Microscopy
- Histology
- Identification and culturing of Pathogens
- Thin Layer Chromatography
- Nanodrop Spectrophotometry

COMPUTER SKILLS

- MS Word
- MS PowerPoint
- Excel
- MS Paint
- Photo Editing
- Internet

SCIENTIFIC SYMPOSIA/MEETINGS ATTENDED

- A symposium on **“Future Trends in Molecular Biological Research and its Application in Agriculture & Health”** March 25-28, 2009. Organized by Centre of Excellence in Molecular Biology and Centre for Applied Molecular Biology, University of the Punjab, Lahore, Pakistan.
- Workshop on **“Ethical Issues Related to Work on Stem Cells”** March 20, 2009. Organized by Centre of Excellence in Molecular Biology and Centre for Applied Molecular Biology, University of the Punjab, Lahore, Pakistan.
- 2nd one day workshop on **“Young Researchers’ Skill Development and NAYS Emerging Ideas Conference”** January 07, 2012. Organized in collaboration between National Academy of Young Scientists and Centre of Excellence in Molecular biology.
- International conference on **“Recent Innovations in Molecular Biology”** November 06-08, 2019. Organized by University of the Punjab.

PUBLICATIONS

1. Baig MT, Ali G, Awan SJ, Shehzad U, Mehmood A, Mohsin S, Khan SN, Riazuddin S. Serum from CCl4-induced acute rat injury model induces differentiation of ADSCs towards hepatic cells and reduces liver fibrosis. *Growth Factors*. 2017 Sep 3;35(4-5):144-60.
Impact Factor: 1.644
2. Awan SJ, Baig MT, Yaqub F, Tayyeb A, Ali G. In vitro differentiated hepatic oval-like cells enhance hepatic regeneration in CCl4-induced hepatic injury. *Cell biology international*. 2016 Dec 13.
Impact Factor: 1.831

LANGUAGES

Proficient in English and Urdu.

REFERNCES

Dr. Shaheen N. Khan

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