

Warda Fatima

Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore
wardaquareshi@yahoo.com, warda.mmg@pu.edu.pk

ACADEMIC BACKGROUND

Degree/ Certificate	Session	Subject	Institution
Ph.D	2018	Microbiology and Molecular Genetics	University of the Punjab
M.S.	2010	Microbiology and Molecular Genetics	University of the Punjab
BS (Honors)	2008	Microbiology and Molecular Genetics	University of the Punjab
H.S.S.C	2003	Pre-Medical group	BISE Lahore
S.S.C	2001	Science group	BISE Lahore

WORK EXPERIENCE

- **ASSISTANT PROFESSOR (October 2018- to date)**

Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore
Subjects taught: Microbial ecology, Human Genetics, General Genetics, Laboratory techniques
Research Supervision: Currently enrolled 5 students from MS/Mphil/BSc and MSc

- **LECTURER (March 2013- October 2018)**

Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore
Subjects taught: Microbial ecology, Human Genetics, Ethical issues in Genetics, Chromosomal abnormalities and genetic counseling
Research Supervision: Completed 13 students from MS/Mphil/BSC and MSC

- **TEACHING ASSISTANT (September 2011 – September 2012)**

Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore
Subjects taught: Chromosomal abnormalities and genetic counseling

- **PART TIME TEACHER (February 2009 –September 2011)**

Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore
Subjects taught: Fundamentals of Microbiology, Animal biodiversity, Human Genetics

- **RESEARCH INTERNEE (22nd June 2008 – 30th June 2008)**

PCR Laboratory, Institute of Nuclear Medicine and Oncology, Lahore (INMOL)
Techniques learnt: Real time PCR, HCV genotyping

- **RESEARCH INTERNEE (April 2007 - April 2008)**

Department of Pediatric Genetics, Children's Hospital, Lahore (Worked as a research student)
Techniques learnt: Karyotyping, conventional PCR, genetic counseling

PROFESSIONAL SKILLS

- **Molecular Biology** skills including DNA/ RNA isolation, conventional and reverse transcriptase PCR, RFLP, Agarose and polyacrylamide gel electrophoresis, chromatographic separation, southern blotting
- **Bioinformatic tools** for Primer designing, Sequence alignment, similarity searching, protein 3D structure, prediction of genetic mode of inheritance
- Peripheral blood culturing for **chromosome analysis**
- **Routine Microbiology skills** including Culturing, Staining, biochemical characterization of microorganisms and antimicrobial sensitivity testing
- **Genetic association and transmission analysis** by haplotyping, LD scoring and ratios

PROJECTS

- **“Inhibition of glutamine transporters- a potent therapeutic approach against breast cancer”**. Cancer research center research grant by University of the Punjab for 2019-21 (Rs. 200,000/-)
- **“Analysis of malignant breast tumor risk associated with variants of meiotic recombination complex genes”**. research project granted by University of the Punjab for 2019-20 (Rs. 150,000/-)
- **“Association of tumor suppressor genes with benign and malignant breast disorders”** research project granted by University of the Punjab for 2017-18 (Rs. 125,000/-).
- **“Molecular genetic studies of schizophrenia in Pakistani families and patients”** Research work was carried out and a thesis was submitted for the partial requirement of degree (PhD in Microbiology and Molecular Genetics).
- **“Association analysis of homologous DNA repair complex genes and breast cancer”**, research project granted by University of the Punjab for 2015-16 (Rs. 125,000/-).
- **Mutational Analysis of *BRCA2* Gene among Breast Cancer Patients of Punjab**, research project granted by University of the Punjab for 2014-15 (Rs. 125,000/-).
- **Mutational analysis of *BRCA* genes in Breast cancer patients from Pakistan**, research project granted by University of the Punjab for 2013-14 (Rs. 125,000/-).
- **“Serum leptin levels and *Leptin* gene mutations in obese children”**, Research work in Human Genetics was carried out and a thesis was submitted for the partial requirement of degree (M.S in Microbiology and Molecular Genetics).
- **“Congenital adrenal hyperplasia in patients with disorders of sexual differentiation”**, Research work in Human Genetics was carried out and a thesis was submitted as the partial requirement of degree (B.Sc. Honors in Microbiology and Molecular Genetics).
- **“Carrier screening of factor VIII and factor IX genes in Pakistani hemophilia A and hemophilia B families”**. Research work in human genetics was carried out with Dr. Saqib Mahmood from University of Health Sciences.
- **“Knowledge of breast cancer in the educational institutions of Lahore.”** Work done and article published with Dr. Samina Khokher from INMOL and Dr. Saqib Mahmood from university of Health sciences.

PUBLICATIONS

- Liaqat Z, Maqsood F, Akhtar T, Nasir MF, Sarwar S, **Fatima W**. Prevalence of BRCA1/BRCA2 frequent mutations in the Pakistani breast cancer patients. *The Professional Medical Journal*. 2020 Jun 10;27(06):1151-6.
- **Fatima W**, Riaz S, Shahzad MA, Naz Z, Mahmood S, Hasnain S. Chromosomal region 1q24. 1 is associated with increased risk of schizophrenia in Pakistani population. *Gene*. 2020 Apr 15;734:144390.
- Ishfaq A, Ali E, **Fatima W**, Hussain N. Dr Genetic Association of Angiotensin Converting Enzyme I/D Gene Polymorphisms with Breast Cancer. *European Journal of Biology and Biotechnology*. 2020 Jul 16;1(4).
- Abbas S, Siddique A, Shahid N, Khan RT, **Fatima W**. Breast cancer risk associated with BRCA1/2 variants in the Pakistani population. *Breast Cancer*. 2019. 26(3):365-372.
- Khan RT, Siddique A, Shahid N, Khokher S, **Fatima W**. Breast cancer risk associated with genes encoding DNA repair MRN complex: a study from Punjab, Pakistan. *Breast Cancer*. 2018 Jan 24:1-6.
- Shanzay A, Siddra TA, **Warda F**, Sheeza A, Maryam A, Aina SZ, Anjum NS, Atif AB. Time Course Detachment of Biofilms in Pipes by Hydrochlorination. *Asian Journal of Medicine and Biomedicine*, 2017, 1:1. (published online 15th December 2017)
- Abdul R, Hasnain J, Zarfshan T, Aina SZ, **Warda F**, Iftkhar A, Atif AB. Incidence of Hepatitis C Genotypes Among the Rural Population of Pakistan. *Asian Journal of Medicine and Biomedicine*, 2017, 1:1. (published online 15th December 2017)
- Qadir NA, Hasnain J, **Fatima W**. Biodegradation of petroleum hydrocarbon by *Micrococcus* sp. in form of wax ball. *African Journal of Microbiology Research*, 2017, 11(41): 1528-1531
- **Fatima W**, Hasnain S, Mahmood S. Gene-environment interactions in schizophrenia: features from a Pakistani family. *Punjab Univ. J. Zool.*, 2017, 32 (1): 021-024.
- **Fatima W**, Mahmood S, Hasnain S, Rana NH, Khan NS, Naeem F, Ayub M. Parental Consanguineous Marriages are Associated with Early Age of Onset of Schizophrenia in a Pakistani Cohort. *International Journal of Human Genetic.*, 2017, 17 (3):135-139
- Asif A, Mohsin H, Chaudhry SN, **Fatima W**. Comparative Analysis of Biosurfactant Production Assays by Five Indigenous Oil Sludge Bacteria. *BIOLOGIA (Pakistan)* 2017, 63 (2), 205-209
- Abass S, **Fatima W**, Mahmood S. Homologous DNA repair: safeguarding genome territories from knives *CURRENT SCIENCE*, 2016, 111(8): 1335-1339
- Aziz F, **Fatima W**, Mahmood S, Khokher S. Screening for Del 185 AG and 4627C>A BRCA1 Mutations in Breast Cancer Patients from Lahore, Pakistan. *Asian Pac J Cancer Prev*, 2016; 17 (4), 1725-1727
- Mohsin H, Asif A, **Fatima W**, Nadeem S, Sabri AN. Assessment of biocalcification by the water absorption test using microorganism from oil contaminated site. *Punjab Univ. J. Zool.*, 2016,31 (1): 009-012
- Khokher S, Qureshi MU, **Fatima W**, Mahmood S, Saleem A. Impact of a Breast Health Awareness Activity on the Knowledge Level of the Participants and its Association with Socio- Demographic Features. *Asian Pac J Cancer Prev*, 2015; 16 (14): 5817-5822.
- Tanweer A, Zaman GP, **Fatima W**, Javed H. Report On Malnutrition As An Epidemic In Pakistan. *Sci.Int.(Lahore)* 2015; 27(3):2589-2592
- Sarwar S, Saleem K, **Fatima W**, Sabri AN. Detection of extended spectrum beta lactamases producing MRSA from hospital waste water in Lahore. *Sci Int (Lahore)*, 2015; 27(1): 399-402.

- Rana S, Munawar M, Shahid A, Malik M, Ullah H, **Fatima W**, Mohsin S, Mahmood S. Deregulated expression of circadian clock and clock-controlled cell cycle genes in chronic lymphocytic leukemia. *Molecular biology reports*. 2014. 41 (1): 95-103.
- Bugvi SM, Imran M, Mahmood S, Hafeez R, **Fatima W**, Sohail S. Screening of intron 1 inversion and three intragenic factor VIII gene polymorphisms in Pakistani hemophilia A families. *Blood Coagul Fibrinolysis*. 2012 Mar; 23(2):132-7.
- **Fatima W**, Shahid A, Imran M, Manzoor J, Hasnain S, Rana S, Mahmood S. Leptin deficiency and *leptin* gene mutations in obese children from Pakistan. *Int J PediatrObes*. 2011;6(5-6):419-27.
- Khokher S, **Qureshi W**, Mahmood S, Saleem A, Mahmud S. Knowledge, attitude and preventive practices of women for breast cancer in the educational institutions of Lahore, Pakistan. *Asian Pac J Cancer Prev*. 2011; 12(9):2419-24.

ADMINISTRATIVE EXPERIENCE

- Member of Board of studies Faculty of Life Sciences, University of the Punjab, Lahore (till June 2019)
- Member of Board of Studies Department of Microbiology and Molecular Genetics
- Member admission committee (MS/MPhil/PhD)
- Member Departmental Committee for Anti Dengue/ Anti Measles & disaster management Activities
- Member departmental committee to conduct seminars/ conferences and workshops
- Member departmental disciplinary committee
- Member departmental committee for management of newly admitted students
- Organizer for departmental outdoor games (girls events)

RESEARCH SUPERVISION (thesis completed)

	Student	Thesis title	Session
MS/ Mphil	Sabeen Riaz	Association of Single Nucleotide Polymorphism (SNPs) in <i>DISC1</i> and <i>DTNBP1</i> genes in Schizophrenic patients	2012-14
	Saba Abass	Association of <i>BRCA1</i> and <i>BRCA2</i> polymorphism with Breast cancer and their analysis in formation of Homologous Repair complex	2013-15
	Rabbia Tariq Khan	Association of single nucleotide polymorphisms in DNA damage repair genes with breast cancer	2014-16
	Ayesha Siddique	Comparative analysis of SNPs from DNA repair genes in benign and malignant breast tumors	2015-17
	Anum Ashfaq	Genetic analysis of <i>BRCA2</i> polymorphisms with risk of breast cancer in Pakistan	2016-18
	Fazilat Safdar	Identification of <i>BRCA2</i> genetic susceptibility markers for benign breast tumors in local population	2017-19
	Warda Shakeel	Role of endogenous molecular clock variants in breast tumorigenesis	2018-20
	Nida Abdul Qadir	Clinical impact of <i>PON1</i> and <i>NQO1</i> genes in pediatric acute lymphoid leukemia	2018-20
	Fareeha Tariq	Disruption of biological clock associated with risk of Cardiovascular Diseases	2018-20
MSc	Mehak Pervaiz	Analysis of mutations in exon 11 of <i>BRCA 2</i> gene in breast cancer patients	2012-14
	Ayesha Siddique	<i>GRM2</i> linkage study in schizophrenia families using STR markers	2013-15
	Mehar-un- Nisa	Case control Analysis of <i>Rad 50</i> gene polymorphisms in breast cancer patients from local population	2014-16

	Sobia Shaukat	Association of a genetic variant from MRE11 gene with benign breast tumors	2015-17
	Ifrah Sakhawat	Genotypic analysis of <i>BRCA2</i> gene polymorphism rs542551 with malignant breast tumors	2016-18
	Tayyaba Rafique	Genetic analysis of <i>PALB2</i> variant rs13330119 with benign breast tumors in local female population	2017-19
	Tooba Hussain	Association of CLOCK gene variant with breast cancer	2018-20
BSc (Hons.)	Faiza Aziz	Mutational analysis of <i>BRCA1</i> gene among breast cancer patients of Punjab	2010-14
	Zara Naz	Association of polymorphisms in intron 3 and intron 12 of <i>DISC1</i> gene with schizophrenia	2011-15
	Afifa Afzal	Mutational analysis of <i>Dystrophin</i> gene in Duchene muscular dystrophy patients by multiplex PCR	2012-16
	Fezza Arshad	Sequence analysis of <i>Aladin</i> gene in Allgrove (AAA) syndrome patients	2012-16
	Unzila Yasin	Genotypic and computational analysis of <i>BRCA1</i> gene single nucleotide polymorphism with benign breast tumors	2013-17
	Nosheen Ishaq	Investigation of interaction between <i>PALB2</i> gene and malignant breast tumors	2014-18
	Nida AbdulQadir	Case-control analysis of rs601391 from <i>meiotic recombinant gene 11</i> with breast cancer	2014-18
	Amina Javid	Evaluation of <i>MRE11</i> gene polymorphism rs601391 associated with risk of benign breast tumors	2015-19
	Laiba	Molecular clock genes mediated development of cardiovascular diseases and hypertension	2016-20

CONFERENCES/ WORKSHOPS ORGANIZED

- One day seminar “Awareness on mental health problems” held by Department of Microbiology and Molecular genetics, University of the Punjab (October, 30, 2019)
- One day Symposium “Tuberculosis Past Present and Future”. Held by held by Department of Microbiology and Molecular genetics, University of the Punjab (March 26, 2018)
- MMG 2018- A conference on Microbiology and Molecular Genetics. Held by held by Department of Microbiology and Molecular genetics, University of the Punjab (February 7-9 2018)
- One Day symposium “Awareness on neurodegenerative disorders” held by Department of Microbiology and Molecular genetics, University of the Punjab (September 21, 2017)
- One day “Nutricia” held by Department of Microbiology and Molecular genetics, University of the Punjab (September 13, 2017)
- One day symposium “Awareness on HIV/AIDS” held by Department of Microbiology and Molecular genetics, University of the Punjab (March 30, 2017)
- Diversity in Microbiology: A cross Talk. held by Department of Microbiology and Molecular genetics, University of the Punjab (December, 17, 2015)
- 10th Biennial International Conference of Pakistan Society for Microbiology. Exploring Microbes for Future endeavors. Held by Department of Microbiology and Molecular genetics, University of the Punjab (March, 25- 28, 2015)
- Two Days Pre conference Workshop on Parasitology and its immunological aspects. Held by Department of Microbiology and Molecular genetics, University of the Punjab (Feb. 13- 14, 2015)

- One day Symposium on Emerging issues of multidrug resistance: A threat to the globe. Held by Department of Microbiology and Molecular genetics, University of the Punjab (October, 2, 2014)
- Workshop on basic biosafety measures in research held by Department of Microbiology and Molecular genetics, University of the Punjab (September 27, 2013)
- Conference on Bio-physicochemical basis for Technopreneurship held by Department of Microbiology and Molecular genetics, University of the Punjab (April 2& 3, 2013)
- One day Workshop on Immunofluorescent Techniques held by Department of Microbiology and Molecular genetics, University of the Punjab (October 18, 2011)
- One Day Workshop on Fluorescent Microscopy: Introduction and Applications held by Department of Microbiology and Molecular genetics, University of the Punjab (Sept. 24, 2011)

CONFERENCES/ WORKSHOPS/ SYMPOSIA ATTENDED/ PAPERS PRESENTED

- Paper entitled “Breast cancer risk associated with genes encoding DNA repair MRN complex” was presented in Cancerbio conference 2020 held by cancer research center University of the Punjab (February 13-15 2020)
- Presented a poster in International Conference on solid state physics. Held by CESS Punjab University (December 8-12, 2019)
- Paper entitled “Association of *NRG3* polymorphisms with schizophrenia: case control study from Pakistan” was presented in conference on ICPU recent innovations in molecular biology. Held by Punjab University (November 6-8, 2019)
- Participated in poster exhibition of Familycon- 29th annual international conference on family medicine (28- 31 March 2019)
- Participated in “A short course on cancer biology”. Held by Department of Microbiology and Molecular genetics, University of the Punjab (February 12-14 2019)
- Paper entitle “Gene polymorphisms of *DISC1* are associated with schizophrenia: a family based study” presented in MMG 2018- A conference on Microbiology and Molecular Genetics. Held by held by Department of Microbiology and Molecular genetics, University of the Punjab (February 7-9 2018)
- Participated in poster exhibition of Familycon- 28th annual international conference on family medicine (January 12-13-14 2018)
- Participated and presented poster in 2nd international conference on innovative biological and public health research, Department of Zoology, GC university Lahore (December 06-07 2017)
- Participated in UHS first international conference on medical ethics “Ethics in challenging times” University of Health sciences, Lahore (March, 20-21 2017)
- Participated in 8th National conference on emerging trends in diabetes, Services institute of medical sciences, Lahore (March, 18, 2017)
- Participated in 3 days hands on workshop on Next generation sequencing data analysis, COMSATS institute of information technology, Islamabad (February 1-3 2017)
- Participated in training workshop on DNA fingerprinting technique Spoligotyping, Department of pathology, University of Agriculture Faisalabad (November 11-12, 2016)
- Participated in Dual use research of concern workshop organized by department of Microbiology and Molecular Genetics, Punjab university and health security partners (July, 18, 2016)
- Consensus Building Workshop on Biorisk Management guidelines. Bacteriology Department, Institute of Public Health, Lahore (March, 3, 2015)

- Participated in 1st joint PAP/RCpath/AMP conference (November, 24-26, 2014)
- Presented a poster in International conference on emerging trends in life sciences for sustainable development (October, 9-11, 2014)
- Recent trends in molecular therapeutics arranged by Department of Microbiology and Molecular Genetics, University of the Punjab (August, 19, 2014)
- International symposium on Molecular forensic: emerging trends held by University of Health sciences, Lahore (May, 29, 2014)
- 1st national student conference on biological sciences, held by NIBGE Faisalabad (March, 27-28, 2014)
- One day workshop on Endnote arranged by Department of Microbiology and Molecular Genetics, University of the Punjab (February, 20, 2014)
- 37th Annual conference of PAP (December 20-22, 2013)
- Conference of molecular bioscience – challenges and opportunities (November 25- 28, 2013)
- Paper entitled: “Leptin replacement therapy: a treatment of childhood obesity” in conference Bio-physicochemical basis for Technopreneurship held by Department of Microbiology and Molecular genetics, University of the Punjab (April 2& 3, 2013)
- Presented a paper entitled “Leptin deficiency and leptin gene mutations in obese children from Pakistan’ in the conference of weight management held by Govt. College of Home Economics, Lahore (November 3, 2012)
- Presented a paper entitled “Leptin deficiency and *leptin* gene mutations in obese children from Pakistan’ in the conference of weight management held by Govt. College of Home Economics, Lahore (Nov. 3, 2012)
- Presented a paper in 4th annual conference of Pakistan Society of Chemical pathologists. (February 25 & 26, 2011)
- Presented a paper entitled “Leptin gene mutations in local obese children” in 7th annual symposium held in The Children’s Hospital and the Institute of Child Health, Lahore (December 4 & 5, 2010)
- Presented poster in the 1st symposium on “Genomics, Proteomics and Metabolomics: Recent Trend in Biotechnology” held in Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore (Oct. 22 & 23, 2007)

OTHER ACTIVITIES

- Reviewer for Journal of Integrative Cancer Science and Therapeutics (ISSN: 2056-4546)
- Reviewer for journal African Health sciences
- Reviewer of Asian Journal of Biotechnology and Bioresource technology
- External examiner 2017, Agricultural biotechnology oral and practical examination, Superior University Lahore.
- External examiner for oral and practical exam of 2019, Basic biochemistry, Biochemistry II, Biotechnology, Fundamentals of Microbiology, Recombinant technology, food technology and preservation Superior University Lahore.
- External Thesis evaluator for MPhil thesis (2019) of MLS from University of health sciences, Lahore

MEMBERSHIP OF INTERNATIONAL SOCIETIES

- International Society for Development and Sustainability (Japan) Membership no: M172915
- American Society of Microbiology
- European respiratory society