In The Name of God



Personal Informations:

Name in Full: Fatemeh Karami

First Name: Fatemeh Family Name: Karami

Date of Birth: Day: 3, Month: 3, Year: 1983

National code: 0060945931

Identity number: 5441

Place of Birth: Tehran

Marital Status: Single

Nationality: Iranian

Academic Degree : PhD, Field : Medical Genetics

E-mail: Fateme.karami@gmail.com

Tel. No : + 98 912 2973882

Higher Education:

Bachelors Degree: Midwifery, Faculty of Nursing & Midwifery - Tehran University of

Medical Sciences, 2006.

M.Sc: Human Genetics, Tabriz Medical University.

Ph.D: Medical Genetics, Tehran University of medical science

Workshops Participated:

- **❖** Advanced Searching
- **❖** Biostatistics I
- Internet
- Microsoft Excel
- * Research Methodology I
- ❖ SPSS I
- Primer Design
- **❖** Western blotting
- Real time RT-PCR
- **❖** Advanced cytogenetics
- **❖** Article review
- ❖ Advanced academic teaching
- ❖ Next generation sequencing
- Laboratory approaches to Ebolla
- HRM in epigenetics

Cooperation:

- Persian Association for Cancer Research (PACR) of Tehran university
- * Rheumatology research center of Shariati hospital
- ❖ Bedune marz researcher center

- Genetic laboratory of Tabriz Medical University
- Genetic laboratory of medical genetic department of Tehran University
 of medical science

Researches:

Past Research:

- **♣ Dr. Davatchi F. :** WHO- ILAR COPCORD Study (Stage 1, Urban Study) in Iran , 2004 2006.
- **♣ Dr. Tehrani Banihashemi A.:** Frequency of usage implementation medicine and traditional methods in the population of Tehran , 2006.
- **♣ Dr. Mohaddes M. :** A study on association of rs13266634(C/T) polymorphism
- ♣ in SLC30A8 gene with type 2 diabetes mellitus in the population of Eastern
 Azerbaijan province
- **♣ Dr. Mohaddes M.:** Hypermethylation in promoter region of *GSTP-1* gene is associated with tumor metastasis in breast cancer carcinom
- **♣ Dr. Mohaddes M.:** Hypomethylation in promoter region of *E-Cadherin* gene is associated with tumor metastasis in breast cancer carcinoma.
- **Dr Mehdipour:** Mehtylation assessment of three cell cycle gene in brain tumors
- **Dr Modarressi:** Production of monoclonal antibody against 5-methylcytosine

Research's Under Work

- Dr Modarressi: Production of monoclonal antibody against 5-methylcytosine
- Dr Mehdipour: Analysis of cell cycle genes methylation status in CVS samples
- **♣ Dr Modarressi**: Assessment of gene expression in Hela and HT-29 cell lines following treatment with probiotics
- **Dr modarressi**: Methylation analysis of two tumor suppressor genes in oral squamous carcinoma

Publications:

Book:

- Genetics for Exam, complete and rapid review on genetics resources accompanying previous master science exams tests, under supervision of Dr S.zeinali. Medical genetics PHD, associated professor in pastuer institute of Iran . (This book has been written in Persian language)
- 2) Signaling pathways of diseases (translation to persian), under observation of Dr N.Zarghami,research and education assistant of new science faculty of Tabriz university of medical science.
- Tellomere territory and cancer (In English). Edited by Dr Parvin Mehdipour.
 Springer publications. 2013
- 4) Epigenetics territory and cancer (In English). Edited by Dr Parvin Mehdipour. Springer publications.2015
- 5) Human molecular genetics By Tom Strachan, Andrew Read (translation to Persian) 2 th Edition. Etminan publication

Papers

- ✓ The Soluble Carrier 30 A8 (SLC30A8) gene Polymorphism and risk of diabetes mellitus type 2 in eastern Azerbijan population of Iran.
- ✓ Association of CD58 Polymorphism with Multiple Sclerosis and Response to Interferon ß Therapy in A Subset of Iranian Population. Cell J.2015 Winter;16(4):506-13.
- ✓ Mutation analysis of androgen receptor gene: multiple uses for a single test. 2014 Dec 1;552(2):234-8.
- ✓ Analysis of *dystrophin* gene in Iranian Duchene and Becker muscular dystrophies patients and identification of a novel mutation. Neurological sciences.

- ✓ Case report of a PKU patient with *PAH* gene deletion: getting closer approach in genetic counseling of metabolic disorders.

 Iranian Red Crescent Medical Journal (under publication).
- ✓ Epigenetic control of cell cycle guardian molecule: An obscure correlation between promoter methylation and expression. Lancet journal of oncology (under publication).
- ✓ Linking ATM Promoter Methylation to Cell Cycle Protein Expression in Brain Tumor Patients: Cellular Molecular Triangle Correlation in ATM Territory. Mol Neurobiol. 2014 Aug 27.
- ✓ The Role of CD14 and CTLA4 Gene Polymorphisms in Risk of Celiac Disease among Patients of Iranian ethnicity. Cell J. 2014 Summer;16(2):171-8
- ✓ A comprehensive focus on global spectrum of BRCA1 and BRCA2 mutations in breast cancer. Biomed Res Int. 2013;2013:928562.
- ✓ Key Role of Promoter Methylation and Inactivation of MCPH1

 Gene in Brain Tumors. J Neurol Res. 2014;4(5-6):133-138
- ✓ Evaluation of methylation status in glutation Stransferase P1(GSTP1) gene promoter in human breast cancer and it relation to tumor grade and stage. Research Journal of Chemistry and Environment. Volume 15 Number 2
- ✓ Evaluation of methylation modification in E-cadherin gene and its application in the improvement of breast cancer. African journal of

pharmacy and pharmacology. Vol.5(16), pp. 1857 - 1862 , October 2011

- ✓ Introducing A New And Simple Protocol For Capillary Electrophoresis Of Double Strand DNA. Journal of Sciences, Islamic Republic of Iran 25(4): 305 308 (2014)
- ✓ Dual anti-metastatic and anti-proliferative activity assessment of two probiotics on HeLa and HT-29 cell lines, Cell Journal , Vol: 18, No: 2, Summer 2016
 - مروري بر روش هاي غير تهاجمي غربالگري سندرم داون از طريق خون مادر. ٧٠ مجله ژنتيک نوين

-تشخيص و آزمايشگاه استفاده از نانوذرات طلا متصل به آنتي فيبرونكتين براي تشخيص سرطان ريه. فصلنامه 14 شماره- 1390 زمستان

Oral presentations

- ✓ The role of CD14 and CTLA4 gene polymorphisms in risk of celiac disease among a subset of Iranian population. 12th international congress of immunology and allergy of Iran.
- ✓ Implementation of cell free fetal DNA in prediction of various prenatal morbidities and mortalities. 6th national congress of reproductive and infertility.
- ✓ New insights in to the role of epigenetic abnormalities in embryonic development and pregnancy outcome. 3th Iranian Medical Genetics congress.
- ✓ New avenue toward non-invasive prenatal diagnosis employing nanotechnology. 6th international congress of Laboratory and clinic.
- ✓ Implicating of gold nanoparticle for detection of urinary PSA:

 A new window toward home based screening of prostate cancer.

Posters:

- ♣ Study on association of rs13266634(C/T) polymorphism in SLC30A8 gene with type 2 diabetes mellitus in the population of Eastern Azerbaijan province. International endocrine and metabolism congress, Esfahan.2010.
- → 3) SLC30A8: a genetic bridge between diabetes mellitus type 1 and type 2. 2th medical genetics congress.2011 Jun. Tehran.
- ♣ What is the best choice of carrier in monoclonal antibody production? A new avenue toward better immunization against desired antigen. 12th international congress of immunology and allergy of Iran.
- ♣ Hypermethylation in promoter region of E cadherin gene is associated with tumor metastasis in breast cancer carcinoma. European Human Genetics Conference 2010 in Gothenburg, poster board number: P06.030.
- ♣ Perturbation in microtubules dynamic instability: a mechanism proposed for toxicity behind AuNPs. Iran Nano Safety Congress 2014.
- ♣ A new avenue in understanding the genetic of diabetes mellitus type 2. 2th Iranian Medical Genetics congress.
- ♣ Integration of genetic science in health system. 2th Iranian Medical Genetics congress.
- ♣ High concentration of vitamin C induce oxidative stress in blood. The 11th International Congress of Iranian Society of Toxicology.

Skills:

Lab Technical:

- DNA extraction
- PCR (Polymerase Chain Reaction)
- PCR RFLP
- Bisulfitation
- RNA extraction and cDNA synthesis

- Real-time PCR and analysis
- Methylation specific PCR(MSP)
- Methylated DNA immunoprecipitation (MeDIP)-Real time PCR
- Cell culture
- Karyotype analysis
- Nanoparticle synthesis and biological conjugation
- Myeloma fusion and hybridoma cell production
- Capillary electrophoresis
- PCR-sequencing
- Bisulfit-sequencing
- Western blotting
- ELISA

Computer skills:

- Microsoft Word
- Microsoft Excel
- Microsoft PowerPoint
- Photoshop
- Adobe reader Pro
- EndNote software
- Chromas software
- Sequencing analysis

Languages:

Farsi

- English
- Arabic

Education background:

- 1)English MSc exam of health ministry
- 2)MSc exam preparation for medical genetics
- 3)license exam preparation for midwifery
- 4) Sundries single education in genetics and biology
- 5)Practical cytogenetics in MSc of human genetics grade
- 6) Practical cytogenetics in PhD grade of medical genetics
- 7) Practical and theoretical education of cell culture in PhD grade of medical genetics

Referenses:

Dr. Modarressi.: modaresi@tums.ac.ir., + 989123385292 Dr. Noori Dalooii,.Nooridalooii@tums.ac.ir, +9888953005 Dr. Mehdipour.: Mehdipor@ tums.ac.ir, + 989121276727.

<u>Tabrizi@tums.ac.ir</u>, +9888953005

Dr. Mohaddes M.: mohaddesmo@yahoo.com, + 989141170345.

Dr. Zarghami N.: Zarghami@tbzmed.ac.ir, + 989143043710.