

Curriculum Vitae



Maryam Abedi

Personal Data:

Birth Date: November 20, 1989

Nationality: Iranian

Contact Information:

Tel: +98-3136687087, +98-9139662139

Email: maryamabedi@mail.mui.ac.ir, maryamabedi.d@gmail.com

Education

2016-Present	PhD student of Medical Genetics, Isfahan University of Medical Sciences
2012-2015	MSc. student of Human Genetics, Isfahan University of Medical Sciences
2008-2012	BSc. Student of Genetics, Shahid Chamran University of Ahvaz

Honors

- The member of bright talent department of Shahid Chamran University of Ahvaz
- Ranked 1st for GPA among B.Sc. Students

Skills and Capabilities

- Medical genetics skills such as genetics counseling
- Molecular biology techniques including real time PCR, RNA extraction, cDNA synthesis and laboratory animal handling
- Bioinformatics tools such as miRNA databases, pathway databases, Gene Expression Omnibus (GEO), protein-protein interaction databases
- Microarray data analysis and post-GWAS data analysis
- Systems biology methods such as network construction and analysis

Teaching Experience

- Educational course of the sixth science Olympiad of university of medical sciences
- Bioinformatics courses for MSc and PhD Students, Isfahan University of Medical Sciences
- Systems biology course for PhD Students, Isfahan University of Medical Sciences
- Systems biology workshop, Regenerative Medicine Lab, Kidney Diseases Research Center, Isfahan University of Medical Sciences
- Microarray data analysis workshop, the 3rd molecular medicine congress. Isfahan University of Medical Sciences
- Analysis of time course microarray data workshop, The 3rd Iranian conference on Systems Biology, Tarbiat Modares University, Tehran, Iran.

Research Projects

2017-now	The integration of different omics data to construct a holistic map of Diabetic nephropathy
2016-now	The prediction of drug targets using machine learning methods.
2012-2015	The assessment of microRNA profile and the microRNA-protein interaction network in diabetic nephropathy with a combination of experimental and computational approaches (MSc. Thesis)
2014-2015	Assessing the significance of topographic parameters of nodes in protein-protein interaction networks for pathway enrichment analysis
2014-now	MicroRNA target identification improves pathway enrichment analysis with transcriptomics data
2014-2016	Computational analysis to identify microRNAs involved in the differentiation of renal stem cell to myofibroblast cell
2013-2015	Assessment of the behavior of regenerating cells in chronic kidney disease (supported by Iranian council of stem cell technology)
2013-2014	Commercialization of stem cell science and regenerative medicine (supported by SABZ Biomedicals company)

Congress Presentation

- **Maryam Abedi**, Computational Analysis of Stromal-Epithelial Interaction Network in Human Breast Cancer, 1st International & 8th Annual Tehran Breast Cancer Congress (Oral Presentation).

- Farnoush Kianpour, **Maryam Abedi**. Gene expression analysis of pancreatic beta-cells from type 2 diabetes provides insight toward the pathogenesis of T2DM. The Third National Congress on Molecular Medicine (Poster).
- Farnoush Kianpour, Yousof Gheisari, **Maryam Abedi**. Microarray Reanalysis of Diabetic Nephropathy Data Provides Insights into the Pathogenesis of the Disease. The Second National Festival and International Congress on Stem Cell and Regenerative Medicine (Poster).
- **Maryam Abedi**, Yousof Gheisari. The construction of a multi-layer network in diabetic nephropathy: a systems biology approach. The 3rd Iranian Conference on System Biology (Poster).
- **Maryam Abedi**, Razieh Fatehi, Yousof Gheisari. Isolated Methylmalonic Acidemia: A Systems Biology Approach to a Monogenic Disorder. 3rd International & 15th Iranian Genetics Congress (Poster).

Publications

- Razieh Fatehi, Sharifeh Khosravi, **Maryam Abedi**, Rasoul Salehi, Yousof Gheisari. Heterozygosity analysis of polycystic kidney disease 1 gene microsatellite markers for linkage analysis of autosomal dominant polycystic kidney disease type 1 in the Iranian population. Sep 2017 Journal of Research in Medical Sciences)
- Louise V. Wain, Ahmad Vaez, Rick Jansen,..., **Maryam Abedi**, Novel Blood Pressure Locus and Gene Discovery Using Genome-Wide Association Study and Expression Data Sets From Blood and the Kidney. Jul 2017 Hypertension.
- Shiva Moein, Shaghayegh Haghjooy Javanmard, **Maryam Abedi**, Mohammad Hosein Izadpanahi, Yousof Gheisari. Identification of appropriate housekeeping genes for gene expression analysis in long-term hypoxia-treated kidney cells. Feb 2017 Advanced Biomedical Research.
- Reyhaneh Rabieian, **Maryam Abedi**, Yousof Gheisari. Central Nodes in Protein Interaction Networks Drive Critical Functions in TGF- β Stimulated Kidney Cells, Jan 2017 Cell Journal (Yakhteh).
- Sayyed-Morteza Hosseini, Fariba Moulavi, Nima Tanhaie-Vash, Vajihe Asgari, Hamid-Reza Ghanaei, **Maryam Abedi-Dorche**, Naser Jafarzadeh, Hossein Gourabi, Abdol-Hossein Shahverdi, Ahmad Vosough Dizaj, Abolfazl Shirazi , Mohammad-Hossein Nasr-Esfahani. The Principal Forces of Oocyte Polarity Are Evolutionary Conserved but May Not Affect the Contribution of the First Two Blastomeres to the Blastocyst Development in Mammals. Mar 2016 PLOS One.

- **Maryam Abedi** and Yousof Gheisari. Nodes with high centrality in protein interaction networks are responsible for driving signaling pathways in diabetic nephropathy. Oct 2015 [PeerJ](#).

Publication of the International Consortium of Blood Pressure (ICBP) 1000G Analyses

- Helen R warren, Evangelos Evangelou, Claudia P Cabrera, ..., The International consortium of Blood Pressure (ICBP) 1000g Analyses (Louise V Wain, Ahmad Vaez,, **Maryam Abedi**, ...) . Genome-wide association analysis identifies novel blood pressure loci and offers biological insights into cardiovascular risk. Jan 2017 [Nature Genetics](#).

Participation in Workshops

- Systems Biology workshop, Pasteur Institute of Iran, 2014.
- Summer School of Critical Thinking, National Elites Foundation of Isfahan, 2014.
- Primer Design workshop, Department of Genetics, Shahid Chamran University of Ahvaz, 2012.
- Molecular Biology Techniques workshop, Biotechnology and Biology Research Center of Shahid Chamran University of Ahvaz, 2011.

Referees

Yousof Gheisari, MD, PhD. Associate professor in Department of Genetics and Molecular Biology, Isfahan University of Medical Sciences. Regenerative Medicine Lab, Isfahan Kidney diseases Research Center, Isfahan University of Medical Sciences, Isfahan, Iran. Tel: +98-31-36687087, Email: ygheisari@med.mui.ac.ir, ygheisari@gmail.com.

Rasoul Salehi, PhD. Associate professor in Department of Genetics and Molecular Biology, Isfahan University of Medical Sciences, Isfahan, Iran. Email: r_salehi@med.mui.ac.ir.

Ahmad Vaez, MD, PhD. Assistant Professor in Department of Bioinformatics and System Biology at School of Advanced Technologies in Medicine of Isfahan University of Medical Sciences, Isfahan, Iran. Tel: +98-31-36687087, Email: a.vaez@umcg.nl, ahmad.vaez@gmail.com.

Hamid Reza Marateb, PhD. Assistant Professor in Department of Biomedical Engineering in Isfahan University, Isfahan, Iran. hamid.reza.marateb@upc.edu, marateb@gmail.com.