Personal information

Name and First name	**SEDAGHATIKHAYAT, Bahareh**
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Nationality	Iranian
Date of birth	08.01.1987
Gender	Female

ResearchGate profile: https://www.researchgate.net/profile/Bahareh_Sedaghati-Khayat

Google Scholar profile: https://scholar.google.com/citations?user=upYpjhMAAAAJ&hl=en

Education

Dates	**September 2014 - September 2016**
Title of qualification awarded	**Master** of Cellular molecular Biology- Genetic
Principal subjects/occupational skills covered	- Seminar: with title of "compering two methods ARMS and LNA"; "Seminar course" autumn 2014. - Seminar: with title of "MLPA results analyzing"; "Genetic engineering-1 course" autumn 2014. - Thesis: "Linkage association of candidate genetic markers in relation to metabolic syndrome in families with metabolic syndrome in Tehran lipid and glucose study (TLGS) population"
Name and type of	Azad university, Tehran North Branch, Iran
Dates	**February 2007- February 2011**
Title of qualification awarded	**Bachelor** of Cellular molecular Biology- Genetic
Principal subjects/occupational skills covered	- Project course and Seminar with title of "molecular view on Prothrombin thrombophilian", winter 2011 - Seminar: Gene Cloning with title of "Biotechnology course" Winter and Spring 2010 - Seminar: Immunclus with title of "Human Gene course" Winter and Spring 2010 - Seminar: Sonogeraphy with title of "Radiation Biology course" Winter and Spring 2010 - Seminar: P-53 Gene with title of "Oncology course" Fall 2009
Name and type of	Azad university, Pishva-Varamin Campus, Iran

Research / Job experience and training

- ✓ **Early Carrier Researcher**
- ✓ **Assistant Researcher**
- ✓ **Genetics Technician**
- ✓ **Lab Technician**
- ✓ **Trainee**

International Experiences:

1. February 2017-Jun 2017 /September 2017-November 2017/May 2018- onwards, de-CODE genetics Co. Reykjavik. Iceland, Under Supervision: Dr. Unnur Þorsteinsdóttir (Unnur.Thorsteinsdottir@decode.is) and Dr. Agnar Helgason (Agnar.Helgason@de-code.is)
   Main activities and responsibilities: After one-month training on data analysis, I worked there on NGS data of our collaborating project.
2. September 2016, The National Research Council (CNR) Institute for Genetic and Biomedical Research (IRGB), University of Cagliari, Sardinia, Italy. Under Supervision: Prof. Francesco Cucca (fcucca@uniss.it)
   Main activities and responsibilities: Statistical trainee

National Experiences:

1. February 2011- onwards, Research Institute for Endocrine Sciences, Shaheed Beheshti University of Medical Sciences, Director: Fereidoun Azizi, Under Supervision: Dr. Maryam Daneshpour.
   Main activities and responsibilities: At this time, I worked as junior researcher in Bioinformatics and Statistic Lab on Tehran Cardio-Metabolic Genetic Study (TCGS).
2. February 2012- June 2015, Kawsar Human Genetics Research Center, Director: Dr. Siroos Zehnali.
   Main activities and responsibilities: Cooperation with research group for design and developing of kits used in molecular genetics specially pharmacogenomics instant patients with cardiovascular disease. My activities were including primer designing, set up of tests, sequencing analysis.
3. July 2009 - January 2011, Department of Clinical Biochemistry, Tehran Medical University, Under Supervision: Prof. Ansary and Prof. Parvin Pasalar.
   Main activities and responsibilities: Assistant Researcher and Genetics technician on project with title of "SCN1A gene polymorphism in Iranian patients with migraine"
4. September 2007-July 2009, Paseh Clinical Lab. Employer: Dr. Mir Majid Mossalae
   Main activities and responsibilities: Training Course and technician in section of Electrophorus-chromatography and Hormones assay.

Papers:

1. Effects of autozygosity on a broad range of human phenotypes, Nature. (Under Review)
2. **Bahareh Sedaghati-Khayat**, Mahdi Akbarzadeh, Kamran Guity, Fereidoun Azizi, Maryam S Daneshpour. Heritability and intra-class correlation of HDL cholesterol in MetS families and linkage association of 6p21.33: Tehran Cardio-metabolic Genetics Study (TCGS). Scientific Report Journal (Under Review)
3. **Bahareh Sedaghati-Khayat**, Maryam S Daneshpour, Mehdi Hedayati, Fereidoun Azizi. A Narrative Review of Biochemical aspects of metabolic syndrome in Iran: past, present and future. Journal of Endocrinological (Submitted)
4. **Bahareh Sedaghati-Khayat**, Maryam Barzin, Mahdi Akbarzadeh, Kamran Guity, Mohammad Fallah, Hoda Pourhassan, Fereidoun Azizi, Maryam S. Daneshpour. Lack of association between FTO gene variations and metabolic healthy obese (MHO) phenotype: Tehran Cardio-metabolic Genetic Study (TCGS). March 2018. Eating and weight disorders: EWD. DOI10.1007/s40519-018-0493-2, PMID: 29525920
5. Koochakpoor G, Mirmiran P, Daneshpour MS, Hosseini-Esfahani F, **Sedaghati-Khayat B**, Hosseini SA, Azizi F. Dietary factors influence the association of Cyclin D2 polymorphism rs11063069 with the risk of metabolic syndrome. Nutrition Research. 2017. doi.org/10.1016/j.nutres.2017.12.006
6. Hosseini-Esfahani F, Koochakpoor G, Daneshpour MS, Mirmiran P, **Sedaghati-Khayat B**, Azizi F. The interaction of fat mass and obesity associated gene polymorphisms and dietary fiber intake in relation to obesity phenotypes. Scientific reports. 2017;7(1):18057. PMID: 29273742
7. Mirmiran P, Esfandiar Z, Hosseini-Esfahani F, Koochakpoor G, Daneshpour MS, **Sedaghati-Khayat B**, Azizi F. Genetic variations of cholesteryl ester transfer protein and diet interactions in relation to lipid profiles and coronary heart disease: a systematic review. Nutrition & metabolism. 2017;14(1):77. PMID: 29234452
8. Hosseini-Esfahani F, Koochakpoor G, Daneshpour MS, **Sedaghati-Khayat B**, Mirmiran P, Azizi F. Mediterranean Dietary Pattern Adherence Modify the Association between FTO Genetic Variations and Obesity Phenotypes. Nutrients. 2017;9(10):1064. PMID: 28954439
9. Daneshpour MS, Fallah M-S, **Sedaghati-Khayat B**, Guity K, Khalili D, Hedayati M, Ebrahimi A, Hajsheikholeslami F, Mirmiran P, Tehrani FR. Rationale and design of a genetic study on cardiometabolic risk factors: protocol for the Tehran Cardiometabolic Genetic Study (TCGS). JMIR research protocols. 2017;6(2). PMID: 28232301
10. Daneshpour MS, **Sedaghatikhayat B**, Guity K, Azizi F. Genome wide association study in Tehran cardio-metabolic genetic study could promotes precision medicine in Iran. Pajoohandeh Journal. 2016;22(4):210-8. (National Paper)
11. Koochakpoor G, Daneshpour MS, Mirmiran P, Hosseini SA, Hosseini-Esfahani F, **Sedaghatikhayat B**, Azizi F. The effect of interaction between Melanocortin-4 receptor polymorphism and dietary factors on the risk of metabolic syndrome. Nutrition & metabolism. 2016;13(1):35. PMID: 27186233
12. Asdadollahpour E, Daneshpour M, **Khayat BS**, Hashemiaghdam A, Amoli MM, Qorbani M, Razi F. Non-Muscle Myosin Heavy Chain 9 Gene (MYH9) Polymorphism (rs4821481) is Associated with Urinary Albumin Excretion in Iranian Diabetic Patients. Iranian Red Crescent Medical Journal. 2017;19(1). doi: 10.5812/ircmj.40076.

13. Matoo S, Fallah MS, Daneshpour MS, Mousavi R, **Sedaghati khayat B,** Hasanzad M, Azizi F. Increased Risk of CHD in the Presence of rs7865618 (A allele): Tehran Lipid and Glucose Study. Archives of Iranian Medicine (AIM). 2017;20(3). PMID: 28287809
14. Naghizadeh F, Guity K, **Sedaghati KB**, Laamerad B, Azizi F, Daneshpour Ms. Familial Hypercholesterolemia in Tehran Lipid and Glucose Study: A Cross-Sectional Study. 2016. (National Paper)
15. Daneshpour M, Fallah M, Guity K, Akbari F, **Sedaghatikhayat B**, Hedayati M, Azizi F. Gender Differences in Apolipoprotein V Polymorphism for Metabolic Syndrome. Journal of Diabetes. 2013; 5:150-1.
16. Fallah MS, **Sedaghatikhayat B** Guity K, Akbari F, Azizi F, Daneshpour MS. The relation between metabolic syndrome risk factors and genetic variations of apolipoprotein V in relation with serum triglyceride and HDL-C Level. Archives of Iranian medicine. 2016;19(1):46. PMID: 26702748
17. Daneshpour MS, **Sedaghatikhayat B**, Hedayati M, Azizi F. From Genome to Gene: A Review of Genes and Genetic Variations to Be Associated with Metabolic Syndrome. Iranian Journal of Diabetes and Metabolism. 2015;14(4):225-34. (National Paper)
18. Darabi A, Keshavarzi F, **Sedaghatikhayat B**, Salehifar P, Masoudifar M, Rad A, Zeinali S, Fallah M. Beta globine gene mutations in blood transfusion-dependent beta-thalassemia major patients in Kurdistan Province hospitals. Scientific Journal of Kurdistan University of Medical Sciences. 2015;20(4). (National Paper)

Posters

1. **B Sedaghati-Khayat**, N Javanrouh, M Hedayati, K Guity, F Azizi, MS Daneshpour; Genetic risk variants of ZPR1/BuD13 for metabolic syndrome and metabolic components identified in Tehran Cardio-metabolic Genetics Study (TCGS); *2018-P18-52D-ESHG*, Poster presentation, Milan, Italy
2. Households and Family Projections in Tehran Lipid and Glucose Study: 1999 to 2016; K. Guity, **B. Sedaghati-Khayat**, A. Momenan, A.S.Hamzehzadeh, N. Sarbazi, F. Azizi, MS Daneshpour; *2018-P18-32D-ESHG*, Poster presentation, Milan, Italy
3. **B. Sedaghatikhayat**, M.Fallah, K.Guity, S.Masjoodi, F.Azizi, M.Daneshpour; Admixture Analysis between allelic effect and HDL-C concentration related to metabolic syndrome (MetS) in Tehran cardio-metabolic genetic study (TCGS), *2016-A-1451-ESHG*, Poster presentation, Barcelona, Spain
4. M.Daneshpour, M.Fallah, **B. Sedaghatikhayat**, K.Guity, S.Masjoodi, F.Azizi; Identification of genomic region associated with high density lipoprotein cholesterol by Genome-wide association studies (GWAS) in Tehran Cardio-metabolic Genetic Study (TCGS); *2016-A-1653-ESHG*, Poster presentation, Barcelona, Spain
5. High prevalence of monogenic familial hypercholesterolemia in a population based study needs deep genetic dissection, 2016-A-2721-ESHG, Poster presentation, Barcelona, Spain
6. Sajedeh Masjoodi, Samira Zoroufchin, **Bahareh Sedaghatikhayat**, Mohammad-Sadegh Fallah, , Kamran Guity, Fereidoun Azizi, Maryam S Daneshpour; Association of FTO Gene Variants with Metabolic Syndrome (MetS) risk factors in Tehran cardio-metabolic Study (TCGS), 2016-A-1633-ESHG, Electronic Poster Presentation, Barcelona, Spain
7. Maryam Daneshpour, **Bahareh Sedaghati khayat**, Mehdi Hedayati, Fereidoun Azizi; From genome to gen: genes and genetic variations to be associated with metabolic syndrome; 17th

ECE 2015 | European Congress of Endocrinology; *16-20 May* 2015 Dublin, Ireland; *DOI: 10.153/endoabs.37.EP606.*

8. N Shokripour, MS Fallah, **B Sedaghatikhayat**, F Azizi, MS Daneshpour; Association rs12970134 of MC4R gene with obesity, replication in Tehran Lipid and Glucose Study (TLGS); The 10th International Congress of Endocrine Disorders. *October 2014.* Poster presentation
9. RS Miri-Mousavi, **B Sedaghatikhayat**, F Azizi, MS Daneshpour, MS Fallah; Lack of association between Rs2048327 and coronary artery disease components in Tehran lipid and glucose study (TLGS) population: a case control study; The 10th International Congress of Endocrine Disorders. October 2014. Poster presentation
10. M.S. Daneshpour, M.S. Fallah, **B. Sedaghatikhayat**, A. Ebrahimi, K. Guity, F. Azizi; Association of rs780094 in GCKR with Metabolic syndrome and related traits were confirmed in Tehran lipid and glucose study; *2014*-A-1740-*ESHG*; Poster presentation
11. M. Daneshpour, N. Partovi, **B. Sedaghatikhayat**, K. Guity; Quality control techniques for prevention of false ascertainment in association studies; *2014*-A-1783-*ESHG*; Poster presentation
12. A. Darabi, M. Fallah, F. Keshavarzi, **B. Sedaghatikhayat**, S. Azadmehr, P. Salehifar, S. Zeinali; Beta globin gene mutations in Kurdistan provinces, Iran; *2014*-A-1948-*ESHG*; Poster presentation
13. **Bahar Sedaghatikhayat**, Maryam Sadat Daneshpour, Mohammad-Sadegh Fallah, Ahmad Ebrahimi, Kamran Guity, Fereidoun Azizi; Association of single nucleotide polymorphism in MC4R gene metabolic syndrome and diabetes aging in Tehran Lipid and Glucose Study. 1st international and 13th Iranian Genetics Congress; 2014; Poster presentation
14. ***B. Sedaghatikhayat,*** N. Hatamnejadian, M. Moghaddasi, S. Zeinali, M. Fallah, A.Ebrahimi; Examination of SCN1B in Iranian epileptic patient; *2012*-A-411-*ESHG*; Poster presentation
15. Ebrahimi, M. Houshmand, S. Zainali, S. Tonekaboni, M. Moghaddasi, M. Fallah,M. Ataei, G. Modaber,N. Hatamnejadian, ***B. SedaghatyKhaiat***, M. Moghaddam, S.Sarabi, M. Hosseini; Screening of SCN1A and MDR1 polymorphisms in epilepsy; June 2012, European Society of Human Genetics (ESHG); Nürnberg, Germany, Poster presentation
16. A. KaKavandHamidi, M. Mahdavi, H. Dehganpour, N. Hatamnejadian, M. Moghaddam, ***B. sedaghatikhayat***, P. Tousi, M. Yusefi, A. Ebrahimi; Molecular diagnosis of common mutations in COL7a1 Gene among Iranian patients suffering from Epidermolysis Bullosa; June 2012, European Society of Human Genetics (ESHG); Nürnberg, Germany, Poster presentation
17. H. Dehganpour, M. Moghaddam, N. Hatamnejadian, M. Mahdavi, A. Kakavand, ***B. Sedaghatykhayyat***, M. Yousefi, P. Tousi, A. Ebrahimi; The mutation in KRT5 gene in Iranian EB patients; June 2012, European Society of Human Genetics (ESHG); Nürnberg, Germany, Poster presentation
18. M. Ansari, M. S. Fallah,A. A. Owji, S. Saeidi, M. Moghadasi, A. Ebrahimi, N. Hatamnejadian, ***B. SedaqatiKhayat***, F. Rezaei; MTHFR and SCN1A genes polymorphism

in Iranian patients with migraine.;Poster presentation at 12th International congress of human genetics (ASHG); October 2011, Montreal Canada

19. A.Yasari Mazandarani, S. Matoo, A. Tavakoli Tameh, M. Mahdavi, ***B. SedaghatiKhayat***, N. Hatamnejadian, SH. Aabadpour, A. Ebrahi; Molecular study of SLC19A1 sequence variations in Iranian patients affected with psoriasis;Poster presentation at 12th International congress of human genetics (ASHG); October 2011, Montreal-Canada
20. M. Mahdavi, N. Hatamnejad, ***B. SedaghatiKhayat,*** S. Abadpour, A. Yasari Mazandarani, S. Matoo, A. Tavakoli Tameh, A. Ebrahimi; Molecular study of Iranian patients affected with dystrophic epidermolysis bullosa. Poster presentation at 12th International congress of human genetics (ASHG); October 2011, Montreal-Canada
21. ***B. Sedaghatikhayat***, N. Hatamnejad S. H. Tonekaboni, Toosi, Barzegar , A. Ebrahimi; Study of TSC 1 & 2 common deletions in Iranian patients affected with Complex Tuberous Sclerosis by MLPA method;Poster presentation at Second Iran National Congress of Medical Genetics; June 2011, Tehran- Iran
22. N. Hatamnejad, ***B. Sedaghatikhayat***, S. H. Tonekaboni, Toosi, Barzegar, A. Ebrahimi; DNA bank for patients with skin diseases and Polycystic Ovarian Syndrome by using peripheral blood;Poster presentation at Second Iran National Congress of Medical Genetics; June 2011, Tehran- Iran
23. S. Matoo , A. Yasari Mazandarani, ***B. SedaghatiKhayat***, N. Hatamnejadian, S. Abadpour , A. Tavakoli Tameh, M. Mahdavi, A. Ebrahimi; Molecular study of patients affected with ichthyosis x link.; Poster presentation at Second Iran National Congress of Medical Genetics; June 2011, Tehran-Iran
24. M. Ansari, M. S. Fallah, A. A. Owji, S. Saeidi, M. Moghadasi, A. Ebrahimi, N. Hatamnejadian, ***B. SedaqatiKhayat***, F. Rezaei; SCN1A gene polymorphism in Iranian patients with migraine; Society of Human; 2011-A-1703-ESHG; Poster presentation

Lecturer

1. Pasture summer school; The three-day workshop of vaccine design; July 2016
2. Iran Cohort Consortium (ICC); Genetic Data and Personalized Medicine workgroup, Jun 2016.
3. Molecular designing test; Iranian Molecular Medicine Network, Pasteur Institute; December 2014.
4. PCR and electrophoresis Workshop. Research Institute for Endocrine Sciences, Shaheed Beheshti University of Medical Sciences, May, 2014.
5. Primer Design workshop; Research Institute for Endocrine Sciences, Shaheed Beheshti University of Medical Sciences; Iranian Molecular Medicine Network; November 2013.
6. Introduce UCSC Genome Browser workshop; Iranian Molecular Medicine Network, Pasteur Institute; September 2013.

Awards & Achievements

1. Short-term fellowship of Institute for Genetic and Biomedical Research (IRGB), Sardinia, Italy, 2016
2. Short-term fellowship of Institute of Psychology CAS, Beijing University in Beijing, 2015

Technical skills and Genetics Laboratory

- Expert technician in genetic lab with full experience on DNA extraction and banking, PCR based test, MLPA and Electrophoresis of nucleic acids
- Designing of primers for different PCR based methods such as tetra-ARMS PCR primers, GAP PCR primers…; Analysis of DNA sequencing, Multi Alignment…
- Familiar with data extraction of ONLINE DATABASES and SITES:
    - Genome 10K Project, UCSC Genome Bioinformatics Browser, Galaxy and …
- Full experience on annotation and analyzing of Whole Exome Sequencing, Whole Exom Sequencing and genomic ChIp data by:
    - KATK, IGV, SAM tools, BAM tools, VCF tools, Annovar, Gimini, Plink …
- Full experience on familial based genomic analysis by:
    - Linkage analysis program (ILINK, MLINK, LINKMAP, FSASTLinke, PrepLink) Merlin, FBAT, ProGeny, Cyrilik
- Statistic tools: R, SPSS
- Also, I am familiar with Meta Analyze and I have few experiences on Data Mining managing.

Personal skills and competences

Computer skills and competences

- Programing: AWK and Bash (Advance), Python (Beginner)
- Competent with most of Microsoft Office programmers; good knowledge about HTML, Windows, Linux.

Language

- Persian (Mother tongue), English (Advance), French (Beginner)