Nazanin Jalilian

Assistant Professor of Medical Genetics, School of Medicine, KUMS

Curriculum Vitae

Personal Information:

Date of birth: 22nd September 1986

Place of Birth: Kermanshah, Iran.

Languages: Persian (Native)

English (fluent)

Married

Contact Information:

Address: Department of Clinical Biochemistry, School of Medicine, Kermanshah University of Medical Sciences, Kermanshah, 6714869914, Iran, Tel/Fax: +98 - 83 – 34274618
Email: n.jalilian@kums.ac.ir

Education:

Ph.D., Medical Genetics, Tehran University of Medical Sciences, School of Medicine, Department of Medical Genetics, Tehran, Iran. Grade Point Average:18.1	2011-2015
M.Sc., Human Genetics, Tehran University of Medical Sciences, School of Medicine, Department of Medical Genetics, Tehran, Iran. Grade Point Average:18.64	2008-2011
B.Sc., Cell and Molecular Biology (Genetics), Shahed University, School of Basic Sciences, Department of Biology, Tehran, Iran. Grade Point Average: 18.23.	2004-2008

Honors and Awards:

11th Top student in Scientific Biology Olympiad for University Students, Tehran, Iran.	2007
2nd top student in Bachelor's graduation of Genetics in Shahed University with GPA of 18.23.	2008
7th top student in Master's entrance exam of Genetics trend in Iran. Ministry of Science, Research and Technology, Accepted in Molecular Genetics, Tarbiat Modares University.	2008
1st top student in Master's entrance exam of Human Genetics in Iran.	2008
Winner of the "Best poster presenter" in 4th neurogenetics congress, Tehran, Iran.	2011
Graduated from Tehran University of Medical Sciences; Iran highest ranked public university in education and research. GPA 18.64 out of 20.	2011
Certified from Student Scientific Research Center (SSRC) & Exceptional Talent Development Center (ETDC).	2011
2nd top student in Ph.D. entrance exam of Medical Genetics in Iran.	2011
Winner of the 3rd place for "best poster presenter" in 12th Iranian Genetics Congress, Tehran, Iran.	2012
Ph.D. Top student in department of Medical Genetics, Tehran University of Medical Sciences.	2012
1st top student in fulfillment of Ph.D. theoretical courses, department of Medical Genetics, Tehran University of Medical Sciences, GPA=18.10.	2013

Publications:

Noori-Daloii M.R., **Jalilian N**, Applications of comparative genomic hybridization in cancer and genetic disorders: a review article, *Tehran University Medical Journal (TUMJ)* 2010;68(1) : 1-11.

Alizadeh F, Tabatabaiefar M.A., Ghadiri M, Yekaninejad M.S., **Jalilian N**, Noori-Daloii M.R., Association of P1635 and P1655 polymorphisms in dysbindin (*DTNBP1*) gene with schizophrenia, *Acta Neuropsychiatrica* 2012: 24: 155–159.

Wayne M. Becker , Lewis J. Kleinsmith, Jeff Hardin, Gregory Paul Bertoni, The World of the Cell, 7th Edition; translated by Moosavi ML, Mansoori AH, Davari A, **Jalilian N**, Shahed University Publication, 2011.

Jalilian N, Tabataiefar M.A., Ahmadi A, Alizadeh F,Noori-Daloii M.R. Genetic Linkage Analysis of DFNB loci in ARNSHL pedigrees in an Southern Khorasan Province in Iran, *Modern Genetics Journal*, 2012.

Noori-Daloii M.R., **Jalilian N**, Izadi P, Sobhani M, Rabii Gilani Z , Yekaninejad M.S., Cytokine Gene Polymorphism and Graft-versus-Host Disease: A survey in Iranian Bone marrow Transplanted Patients, submitted, *Molecular Biology Reports*, 2013:40(8):4861-7

Zekri A, **Jalilian N**, Compiling tests of human genetics, SANA publication, 2014.

Jalilian N, Tabatabaiefar M.A., Farhadi M, Bahrami T, Emamdjomeh H, Noori-Daloii M.R.Molecular and clinical characterization of Waardenburg syndrome type I in an Iranian cohort with two novel PAX3 mutattions, *Gene*, 2015:574(2): 302-7.

Jalilian N, Tabatabaiefar M.A., Farhadi M, Bahrami T, Noori-Daloii M.R Novel PAX3 gene mutation causes Waardenburg syndrome type I an Iranian family, *Int J Pediatr Otorhinolaryngol*. 2015 Oct;79(10):1736-40.

Akouchekian M, Hemati S, Jafari D, **Jalilian N**, Dehghan Manshadi M, Does PTEN gene mutation play any role in Li-Fraumeni syndrome? Med J Islam Repub Iran 2016 (29 May). Vol. 30:378.

T. Bahrami, **N. Jalilian**, G. Karbasi, M. R. Noori- Daloii, Specific Distribution of *GJB2* Mutations in Kurdistan Province of Iran; Report of a Relatively Isolated Population, Journal of Sciences, Islamic Republic of Iran, 2017,28(1): 5 – 11.

Abdollah Zadeh R, **Jalilian N**, Sahraian MA, Kasraian Z, Noori-Daloii MR, Polymorphisms of RPS6KB1 and CD86 associates with susceptibility to multiple sclerosis in Iranian population, Neurol Res. 2017 Mar;39(3):217-222.

Jalilian N, Tabatabaiefar MA, Alimadadi H, Noori-Daloii MR, SOX10 mutation causes Waardenburg syndrome associated with distinctive phenotypic features in an Iranian family: A clue for phenotype-directed genetic analysis, Int J Pediatr Otorhinolaryngol. 2017 May;96:122-126.

Jalilian N, Tabatabaiefar MA, Bahrami T, Karbasi G, Bahramian MH, Salimpoor A, Noori-Daloii MR, A Novel Pathogenic Variant in the *MITF* Gene Segregating with a Unique Spectrum of Ocular Findings in an Extended Iranian Waardenburg Syndrome Kindred, Mol Syndromol. 2017 Jun;8(4):195-200.

Jalilian N, Tabatabaiefar MA, Yazdanpanah M, Darabi E, Bahrami T, Zekri A, Noori-Daloii MR,A Comprehensive Genetic and Clinical Evaluation of Waardenburg Syndrome Type II in a Set of Iranian Patients, International Journal of Molecular and Cellular Medicine (IJMCM).2018, 7 (1).

Rahimi Z, Bozorgi M, Rahimi Z, Shakiba E, Yari K, **Jalilian N**, Vaisi-Raygani A- MTHFR C677T polymorphism is associated with the risk of breast cancer among Kurdish population from western Iran, International Journal of Cancer Management, 2019, 12 (3).

Taghizadeh E, Mirzaei F, **Jalilian N**, Ghayour-Mobarhan M, Ferns GA, Pasdar A, A novel mutation in USF1 gene is associated with familial combined hyperlipidemia, IUBMB Life. 2019 Nov 14. doi: 10.1002/iub.2186. [Epub ahead of print].

Akbarian F, Tabatabaiefar MA, Shaygannejad V, Shahpouri MM, Badihian N, Sajjadi R, Dabiri A**, Jalilian N**, Noori-Daloii MR, Upregulation of MTOR, RPS6KB1, and EIF4EBP1 in the whole blood samples of Iranian patients with multiple sclerosis compared to the control group .Metab Brain Dis. 2020 Aug 18. doi: 10.1007/s11011-020-00590-7. Online ahead of print

Alibakhshi R, Nejati P, Hamani S, Mir-Ahadi N, **Jalilian N.** Cytogenetic Analysis of 570 Couples with Recurrent Pregnancy Loss: Reporting 11 Years of Experience. J Hum Reprod Sci. 2020 Jul-Sep;13(3):216-220.

Yazdanpanah M, **Jalilian N**, Abdollah Zadeh R, Sahraian MA, Noori-Daloii MR. Investigating the association of polymorphisms of ANKRD55 and MMEL1 with susceptibility to multiple sclerosis in Iranian population. Int J Neurosci. 2021 Jan 24:1-6.

Rahimi Z, Ghorbani Z, Motamed H, **Jalilian N**. Aberrant expression profile of miR-32, miR-98 and miR-374 in chronic lymphocytic leukemia. Leuk Res. 2021 Dec;111:106691. doi: 10.1016/j.leukres.2021.106691. Epub 2021 Aug 21. PMID: 34455196.

Jalilian N, Maleki Y, Shakiba E, Aznab M, Rahimi Z, Salimi M, Rhimi Z. p53 p.Pro72Arg (rs1042522) and Mouse Double Minute 2 (MDM2) Single-Nucleotide Polymorphism (SNP) 309 Variants and Their Interaction in Chronic Lymphocytic Leukemia(CLL): A Survey in CLL Patients from Western Iran. Int J Hematol Oncol Stem Cell Res. 2021 Jul 1;15(3):160-169.

Setoodeh A, Panjeh-Shahi S, Bahmani F, Vand-Rajabpour F, **Jalilian N**, Sayarifard F, Abbasi F, Sayarifard A, Rostami P, Parvaneh N, Akhavan-Niaki H, Ahmadifard M, Tabrizi M. Molecular and clinical characterization of autoimmune polyendocrinopathy-candidiasis-ectodermal dystrophy syndrome (APECED) in Iranian non-Jewish patients: report of two novel AIRE gene pathogenic variants. Orphanet J Rare Dis. 2022 Jan 6;17(1):10.

M.Sc. Thesis:

Mutation Detection in *GJB2*, Exon 2, & Linkage Analysis for 3 Common DFNB loci (DFNB4, DFNB3, DFNB59) in 10 Large Pedigrees from South Khorasan Province. 2010-2011

Supervisor:

Dr. M.R. Noori-Daloii, Department of Medical Genetics, Tehran University of M Medical Sciences.

Ph.D. Thesis:

Genetic Analysis of *PAX3, MITF, SOX10, SNAI2, EDN3/EDNRB* Genes involved in Waardenburg Syndromes in Iranain Families (2012-2015)

Supervisor:

Dr. M.R. Noori-Daloii, Department of Medical Genetics, Tehran University of Medical Sciences.

Advisor:

Dr. M. Farhadi, Department and Research Center of ENT and Head and Neck Surgery, Iran University of Medical Sciences, Iran.

Dr. M.A. Tabatabaiefar, department of Medical Genetics, Isfahan University of Medical Sciences.

Thesis Supervision

Expression Analysis of miRNAs regulating Apoptosis pathway (miR-98, miR-374a, miR-32) in Chronic Lymphocytic Leukemia in Kermanshah Province, **second supervisor**, completed.

The study of association between P53 and MDM2 mutations with the risk of chronic lymphoblastic leukemia (CLL) and prognosis of disease in CLL patients of Kermanshah, **Advisor**, completed.

The survey of NOS3AS variants (rs12666075, rs71539868 & rs7830) with susceptibility to essential hypertension, **supervisor**, ongoing project.

Evaluation of Nrf2 and SOD1 gene expression and epigenetic alterations of the mir-17 /Nrf2/ SOD1axis and their relationship with oxidative stress and Superoxide dismutase enzyme activity and their cofactors in pregnant women with preeclampsia, **Advisor**, ongoing project.

Assessment of the probable distribution of Dicentric chromosomal aberration in peripheral blood lymphocyte of exposed radiation worker in various radiobiological departments by uniformed and ununiformed exposure, **Second supervisor**, ongoing project.

Prevalence of chromosomal aberrations in patients with amenorrhea: A survey in Kermanshah province, **supervisor**, ongoing project.

Research Activity:

Evaluation of epigenetic changes of miR-153-3p/GPX1/HMOX1 axis, HMOX1 and GPX1 gene expression, Glutathione peroxidase activity and oxidative stress parameters in preeclampsia and normotensive pregnancy	2021-present
Cytogenetic analysis of Couples with recurrent pregnancy loss in Kermanshah Province	2020-2021
Genetic Analysis of PAX3 & SOX10 in five Iranian pedigrees affected by Waardenburg syndrome type I & 4	2020-present
Expression Analysis of lncRNA MAGI2-AS3, CASC7 & H19 in Chronic Lymphocytic Leukemia compared to Normal Population in Kermanshah Province	2020-present
Association Study of NO/cGMP signaling pathway with susceptibility to hypertension and serum lipid profile in Kermanshah province	2018-2020
Expression analysis of circulating miRNA-96 and miRNA-146a in serum samples of women affected with uterin endometruim as Potential biomarker for early diagnosis	2016-2019
Gene expression analysis of mTOR signaling pathway (mTOR , RPS6KB1 and 4E-BP1) in Multiple sclerosis (MS) patients	2016-2018
Association study of rs6859219 polymorphism in ANKRD55 gene and rs3748816 polymorphism in MMEL1 gene with susceptibility to multiple sclerosis in patients referred to the Sina hospital in Tehran	2016-2018
Deletion/ duplication Analysis of *MITF*, *SOX10* & *PAX3* among Iranian families affected with Waardenburg syndrome	2015-2017
Genetic Association study of rs180515 in 3' -UTR of *RPS6KB1*and rs9282641in 5 -UTR of *CD86* with susceptibility to Multiple Sclerosis.	2014-2015
Mutations Analysis of *GJB2* Gene and Linkage Analysis of DFNB4, DFNB7/11 and DFNB21 Loci in 20 affected large Pedigrees with Autosomal Recessive Non-Syndromic Hearing Loss (ARNSHL) in Kurdistan Province.	2012-2015
Genetic Linkage Analysis of DFNB loci in ARNSHL pedigrees in Southern Khorasan Province in Iran.	2010- 2013
Relationship between cytokine gene polymorphisms and graft-versus-host disease after allogeneic stem cell transplantation in an Iranian population.	2009-2011

Research Interests:

Genetics of Hearing Impairment
Genetic Testing
Molecular Cytogenetics applications in genetic testing and gene discovery
Genetic Linkage Analysis and its applications in gene finding
Understanding Signaling Pathways in Human disorders
Deciphering the role of non-coding RNAs in Human disease

Knowledge of Bioinformatics and Laboratory Techniques:

Prenatal diagnosis of chromosomal aneuploidies (Karyotype, QF-PCR and MLPA)
Cytogenetics and Molecular Cytogenetics techniques including karyotype analysis, Fluorescent in Situ Hybridization (FISH) and MLPA.

Molecular Genetics Techniques such as DNA extraction, RNA extraction, PCR, PCR-RFLP, Tetra ARMS PCR and RT-PCR.

Bioinformatics and software such as, Chromas, Online websites for primer design and DNA analysis (NCBI, Ensembl Genome Browser), easyLINKAGE(for Linkage analysis), Cyrrilic (Pedigree drawing software), in silico analysis of novel variants, EndNote, miRNA target prediction, in silico working with lncRNAs.

Teaching Experience:

Teaching genetic counseling, Qom University of Medical Sciences.	2011
Teaching PCR technique for Ph.D. students of Medical Genetics, Tehran University of Medical Sciences. 2 hours, for Genetic Engineering course, Under Supervision of Dr. Modaressi and Dr. Mobasheri.	2012
Teaching genetics for midwifery Students, KUMS	2015-present
Teaching genetics for nursing students, KUMS.	2016-present
Biochemistry and Molecular diagnosis, M.Sc. students of clinical biochemistry	May-July 2016
Teaching medical genetics for laboratory medicine students, KUMS.	2016-present
Teaching genetics for radiobiology students, KUMS.	2019-presents
Teaching genetic counseling and medical genetics for M.Sc. students of midwifery, KUMS	2018-present
Teaching bioinformatics for M.Sc./Ph.D. students of clinical biochemistry, KUMS.	2018-present
Teaching English for professionals- M.Sc. students of clinical biochemistry, KUMS	2021-Present

Courses and Workshops:

How to publish a scientific journal article, conducted by Springer and Edanz, Tehran University of Medical Sciences, Tehran, Iran.	Nov. 2011
Cell Culture of Stem Cell, Tehran University of Medical Sciences, Tehran, Iran.	Jan. 2012
Advance workshop on clinical cytogenetics, Tehran University of Medical Sciences, Tehran, Iran.	Apr. 2014
Chromosome analysis and FISH, Sarem Hospital	Apr-May 2015
An introduction to Elsevier database, Kermanshah University of Medical Sciences, Kermanshah, Iran	Aug 2016
An introduction to OVID database, Kermanshah University of Medical Sciences, Kermanshah, Iran	Dec 2016
Several courses presented by Vice Chancellor for Research of Kermanshah University of Medical Sciences, Kermanshah, Iran.	2016-2022
Several courses presented by Continuing Medical Education, Iran	2016-2022

Abstracts and Seminars:

Jalilian N, Tabataiefar M.A., Ahmadi A,Noori-Daloii M.R (2011)Mutation Detection in GJB2,Exon 2, and Linkage Analysis for 3 Common DFNB loci (DFNB4, DFNB3, DFNB59) in 5 Large Pedigrees in Southern Khorasan Province, 4th neurogenetics congress, Tehran, Iran.

Jalilian N, Tabataiefar M.A., Ahmadi A,Noori-Daloii M.R. Genetic Linkage Analysis of DFNB loci in ARNSHL pedigrees in an Southern Khorasan Province in Iran (2011). Oral presentation, Research day, department of Medical Genetics, Tehran University of Medical Sciences, Tehran, Iran.

Jalilian N, Tabataiefar M.A., Ahmadi A, Alizadeh F,Noori-Daloii M.R. Genetic Linkage Analysis of DFNB loci in ARNSHL pedigrees in an Southern Khorasan Province in Iran,(2012).12th Iranian Genetics Congress, Tehran, Iran.

Jalilian N, Tabataiefar M.A., Ahmadi A, Noori-Daloii M.R (2012). Different contribution of DFNB loci in Hearing Impaired pedigrees in Iranian population, European Society of Human Genetics Conference, Nürnberg, Germany.

Genetic Linkage Analysis of DFNB loci in ARNSHL pedigrees in Southern Khorasan Province in Iran, M. R. Noori-Daloii, **N. Jalilian**, M. Tabatabaiefar, F. Alizadeh, L. Kialashaki, A.Ahmadi, Z. Roshani, European Journal of Human Genetics, Volume 21, Supplement 21,June 2013, p 491

Deciphering the Genetic basis of Hearing Impairment in Iran; an Ethnic based Survey, M. R. Noori-Daloii, F. Alizadeh, **N. Jalilian**, M. A. Tabatabaiefar, L. Kialashaki, A. Ahmadi-Shadmehri; European Journal of Human Genetics, Volume 21, Supplement 21,June 2014, p 391

Jalilian N, Tabatabaiefar M.A., Farhadi M., Ememdjomeh H, Bahrami T, M.R. Noori-Daloii, Genetic Analysis of *PAX3, MITF*, *SOX10*, *SNAI2*, *EDN3*/*EDNRB* Involved in Waardenburg Syndrome in Iranian Families, The 1st International and 9th National Iranian Neurogenetic Congress, oral presentation, 2-4th March 2016, Tehran, Iran.

Jalilian N, Tabatabaiefar M.A., Bahrami T, Karbasi G, Bahramian M.H., Salimpoor A, Noori-Daloi M.R., Clinical and Molecular Characterization of an Iranian WS2 family; 5th national seminar on genetic counseling and prevention of disability, 10-11 Aug 2016, Tehran, Iran.

Jalilian N, Tabatabaiefar MA, Yazdanpanah M, Darabi E, Bahrami T, Zekri A, Noori-Daloii MR, Gene copy number variations accounts for Waardenburg syndrome among Iranian population, 6th national seminar on genetic counseling and prevention of disability, 1-2 Nov 2017, Tehran, Iran.